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"CURLY HEAD"
WILMA B. McDEVITT



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No. 1

The Camera in the Windward Islands

Part II

HERBERT B. TURNER



AILING at midnight, we found ourselves the next morning in sight of numerous islands, each in its way having a certain fascination about it; but the most remarkable of them all was the Dutch Island of Saba, a volcanic cone rising out of the sea to the height of three thousand feet, having no harbor, and, on account of its abrupt cliffs, but one or two possible landing-places. Here at an altitude of one thousand feet, tucked in a sub-crater, is its principal village, known as Bottom, where the Dutch people speak English, and for generations have followed the craft of boat-building, lowering their product into the sea by means of a track.

Passing during the morning the graceful mountainous island of St. Eustatius, which also belongs to the Dutch, we approached the first of the British possessions in our path, the lofty and gorgeously green island of St. Kitts, where we dropped anchor at about noon. The afternoon was spent in and about its capital, Basseterre, which has a very tropical quality about it both architecturally and botanically. It is a clean, well-laid-out little city of some twelve thousand people hugging a sandy beach and has a sort of romantic charm all its own. Coconut-palms, the most graceful of all palm-trees, abound about the town, under which negroes have built their huts, and here especially is much material for the camera-user, providing he opens up his lens well and gives long exposures, for the tropical green absorbs light like the mischief. The city possesses some rather fine old houses standing sometimes amid gardens which are abloom with color. Inland and along the coast are extensive plantations and small settlements which afford much for the pictorialist.

From St. Kitts the island of Nevis can be seen rising out of the ocean but a few miles distant. Its principal volcanic cone gracefully lifts itself

to some four thousand feet. It was at Nevis that Alexander Hamilton was born.

The next port after St. Kitts for the "Manoa" to call at was St. John's, the capital of the British Leeward Island Confederation situated on Antigua. Antigua is an island of low hills, pretty in its greenness, but not of special interest. St. John's is a trifle larger and busier than Basseterre, but by no means so picturesque.

Another night at sea, and we were at the French Island of Guadeloupe, a very large island—or two islands all but connected—on one of which lofty mountains reach far into the gorgeously blue sky, whereas the other is low. Here at Pointe-à-Pitre we found a decided change of scene, for in aspect it is a city of eighteen thousand transplanted from Southern France, with all the quaint architectural features and color we, who love France, like so well. The negro population, which, of course, like all the islands in these southern seas, greatly outnumber the whites, here blossom out, under the kindly influence of the French, in raiment and head-dresses of brilliant hues, adding greatly to the pictorial charm of the place. There is a large market-place in the center of the town, which, during the morning-hours, is literally jammed with people of all shades of color, both in flesh and in costume and it affords much picture-material. The little port alone will keep the cameraman content for an hour or two with its quaint shipping and doings. The country about the city has much luxurious vegetation, although an automobile trip inland amply repays one.

The next port of call is the British town of Roseau, capital of the towering and very tropical-looking island of Dominica, another large island, extremely picturesque, but, to me at least, somber. Roseau is a small town well situated at the foot of a mountain, amid thick foliage, very attractive from the sea, but not of great interest in



THE DUTCH ISLAND OF SABA

HERBERT B. TURNER

itself, except for its large, well-kept and truly remarkable Botanical Garden, in which grow specimens of all things of the tropics in trees, shrubs and plants. However, there is enough there to busy the picture-seeker, and, without doubt—if one could put in a week or so taking trips into the interior—much very fine scenery would be encountered.

From Dominica it is but a few miles' sail to Martinique. Ever since boyhood I have been interested in the South Sea Islands of the Pacific. I have read all the books of travel that I could get hold of on the subject, and have studied many photographs and sketches made of those wonderful islands. For many years I have pictured them in my mind—have, I suppose, idealised them. As Martinique rose out of the sea I began to believe that, perhaps, it was something akin to my South Sea dream-islands, and, as we drew nearer, I was certain of the fact; for here was a lofty island, not somber like Dominica, but smiling and friendly, which seemed to extend an atmosphere of good cheer and romance out to us across the wonderfully colored sea—suggestive of mysterious beauties concealed among her mountains and valleys—of tropical charm and peace. As the ship glided along its extensive coast, we came first to the foothills of Mt. Pelée, which rose higher and higher from the

water's edge in fantastic masses until the volcano itself, split and eroded by its last great outbreak in May, 1902, when it wiped out the world-loving city of St. Pierre, overtopped them all at its altitude of little less than a mile. The hills and mountains were clothed in a thick cloak of exquisite vegetation, softening their outlines. As we steamed past the volcano itself, we could see the great lava-beds and crevices caused by the flow, a grand but awesome sight. Shortly we were abreast of St. Pierre, or what was once St. Pierre, now for the most part long lines of green mounds extending along the beach for some distance and running back to the mountain-side—nay, climbing the mountain-side to a considerable height. Here and there, a gray wall protruded from the green growth that covers the ruins, that of the cathedral being conspicuous among others. But St. Pierre is not wholly dead, for of late building has been begun on a small scale, and in years to come, no doubt, another city will take the place of the old, which was the tomb of so many thousands.

From St. Pierre onward the scenery becomes more and more beautiful; the mountains drop off for a space only to round up higher and higher as we approached the southern end of the island. Such graceful mountains they are, that one has difficulty to take his eyes off them to observe

the coast-line with its very white sand, and fringe of cocoanut-palms which offer shade to many little settlements of thatched houses, before which, on the beach, were drawn up numerous fishing-boats and canoes for all the world like a South-Sea picture. Brightly clad people could be seen moving along the shore or busy about the boats. Now and again, we got a glimpse of a town with its plastered houses and red roofs clustered about a church half hidden in the surrounding green. Higher on the hillsides and mountain-slopes beyond were plantations

confronted by an exquisite statue in white marble of Empress Josephine, who was born in a small suburb just across the bay.

Here again we found a city very French in appearance, with its streets filled with life, its shops giving evidence of brisk trade, its cafés showing that the French have not forgotten the customs of the home-country. I cannot say that the city as a whole has much beauty; but there are numerous pleasing vistas, and it is the largest city one sees until Barbados is reached, so that the voyager is much impressed by it. If



SEASIDE-MARKET, ST. KITTS

HERBERT E. TURNER

and well-cultivated farms, with here and there a ranch-house surrounded by negro cabins. Roads could be seen wending their way over the hills. From the much-eroded mountains, covered with their thick green, waterfalls now and again tumbled down into green dell-like places far below. At last, rounding a promontory, we entered the spacious and picturesque harbor of Fort de France, and before us lay the city itself, of thirty thousand souls, with fascinating suburbs on terrace-like hills at its back, behind which stood out the mountains. Fort de France, certainly, has a splendid situation from the picturesque standpoint.

At one side of the city proper is a large park-like space, and at its shore we soon landed to be

the costumes of the colored folk of Guadeloupe are noteworthy, those of Martinique are far more so. The women clothe themselves in startling colors, some of which are truly beautiful, set off by this paradise of flowers and variously assorted greens. The women carry themselves with a stately grace that is quite beyond our women of the north, and many are very charming to look upon.

If the city does not offer anything exceptional to the pictorialist, the surrounding country does. We had practically two days in port, so we made use of various motor-cars that stand for hire by the park-side, and ascended the hills past the pretty suburban villas amid their gardens, and drove through the higher country beyond. Our



ST. PIERRE, MARTINIQUE

HERBERT B. TURNER

way sometimes led through thick groves of bamboo of enormous height,—higher than I ever saw in Japan.—sometimes it passed acres of cocoa, and again bananas. Often hedges of coffee were encountered, and everywhere were fruit-trees and breadfruit—hardly a fruit in our sense of the word, but a good and valuable edible just the same. Of course, many varieties of palms grow everywhere. We got magnificent views of the sea lying far below, a sea in color undreamed of by those who are only familiar with our northern waters, and beheld vast panoramas of the mountains, as well as the graceful contours of the coast-line.

Our objective point was usually some quaint village; and, after visiting it, we would retrace our journey and see the red-roofed city with its open-work cathedral lying far below us from the hills we were on. It was on these rides that I made my chief errors in exposure by underestimating the light-absorbing power of the foliage. The bamboo-lined roadways needed double the exposure that I gave, namely, F/8 at 1/25; F/5.6 at 1/25 would have been better. Houses of brown thatch under breadfruit and palm-trees may deceive the eye into F/11 at 1/30; but you will find that you have very little to show for your trouble on your plate.

Martinique is certainly all-satisfying to those

who have an eye for beauty of landscape. It was to us the most beautiful of all the islands we saw, and we longed to hire one of the little villa-like homes amid its garden of ever-blossoming flowers, situated on the hill above the city and commanding a view of the sea and mountains, and settle down for a good, long visit. But it was not to be this time.

We put out to sea again on the second night to find ourselves the following morning approaching Bridgetown, the capital of Barbados, having skipped the island of St. Lucia, a usual port of call, as we had no freight for it.

Barbados, strictly speaking, does not belong to the Windward Island group. It certainly does not belong to that group geologically, for, instead of being a volcanic product, its origin is chiefly coral. It lies to the eastward of the chain of mountain-tops that we have been following, a lone specimen of its kind. The island is about twenty-two miles long and fifteen miles wide, and boasts that, outside of, perhaps, China, it is the most thickly populated spot on the earth, with a population of some two hundred thousand, or nearly twelve hundred to the square mile.

As one views it from the ship, it appears almost flat; yet it slopes from the Bridgetown side of the island (the south side) gently to the height



SCENES IN BRIDGETOWN, BARBADOS
HERBERT B. TURNER

of about one thousand feet near the opposite coast, where it drops in cliffs to the shore-line.

Its aspect is cheerful, and one of intense green—due largely to the extensive cultivation of cane-sugar. There are some small forest-tracts, and numerous groves of mahogany and other trees. The coast-line from Bridgetown presents a long line of variously tinted dwellings shaded more or less by palms, and the trees of the latitude.

The city—the capital, and the chief port—has a population of over forty thousand, and one

winter-climate than Bermuda, and do not care for either California or Florida. Barbados offers much, with its "Marine" and other hotels at Hastings, a suburb of Bridgetown, on the sea. Bridgetown itself is quaint, some of its streets suggesting not a little such old-world cities as Constantinople and Seville with balconied houses overhanging the street. The shore-line is delightful, the many drives picturesque, and the climate perpetual summer, made ideal and healthful by the ever softly blowing trade-winds. In our experience, it stands next to Honolulu from



FISHERMAN, BARBADOS

HERBERT B. TURNER

is keenly impressed, as in no other island on the route, of the white man's influence in its history and development, and the English white man at that, with his predilection for good government, law, order, cleanliness and suitable habitations in which to dwell amid pleasing surroundings. I mean by that that Barbados presents to the American a civilization more in tune with what he is accustomed to, with suburban homes amid pretty grounds, broad streets, shops more on the order of those of the north, and certain provisions for sports such as horse-racing, cricket, golf, tennis and sea-bathing.

For those who desire a better and milder

the climatic standpoint, and that is the biggest compliment that can be paid it.

The island, low and lacking in scenic attractions of the conspicuous type, yet abounds with delightful pictorial material. There are the palm-fringed beaches where the great rollers come tumbling in; the small negro fishing-villages with the daily landing of the catch; the tree-arched roads; the pretty villas covered with trailing Bougainvillea; dear, old stone-churches, dating nearly three hundred years back, amid their mahogany groves, that seem to have wandered out of England and to have settled themselves here in the tropics. There



BARSHEBA DISTRICT, BARBADOS

HERBERT B. TURNER

are hundreds of great stone windmills, with their Dutch-style sails, scattered all over the island; sugar- and rum-plants (often with pleasing lines) built many generations ago of solid masonry and still in use; superb views from the highlands over sea and country; Bridgetown with its odd shops and balconied streets, not forgetting to mention its attractive little harbor and queer, little sailing-craft mixed with modern shipping from Europe and the Americas.

In the week that one may spend on Barbados, should the round trip only be contemplated, while the ship goes on to Demerara, South America, and returns, much can be seen and much done from the photographic standpoint; but if one cares for results, one must not trust plates or films to the local photo-finishers. Among our fellow-passengers were a number who possessed cameras of the better grade equipped with anastigmat lenses. Naturally, these fellow-enthusiasts were eager to see the

results of their various exposures on the islands to the north, and thus, instead of turning in one spool of film, or plate or two, turned in all. I saw the results later—overdevelopment, spots, stains, scratches, under-fixing, and about all that can happen to a negative by carelessness, uncleanness and ignorance.

The hotels at Barbados are comfortable and inexpensive from the American standpoint. We stayed at the "Marine," the largest and most comfortable hotel on the island, accommodating, I should say, over two hundred guests. The rate was three dollars and a half a day, meals included. The smaller hotels quoted fifteen dollars a week up.

On the return-voyage, calls are again made at the various islands, but the visits are brief. Finally, St. Thomas is reached, and then comes the long trip to New York during which one begins to realise what an ideal existence one has been leading amid scenery that is truly gorgeous.



A Method of Producing Reversed Dye-Images

J. I. CRABTREE



IN the course of a series of experiments on the effect of an acid-hypo solution on various dye-solutions and samples of tinted motion-picture film, it was observed that on immersing certain samples of tinted film in the acid-fixing solution, the dye was bleached out in the region of the silver-image, while the highlights remained unaffected—producing a result opposite to that of toning, namely, tinted highlights and black-and-white shadows.

The possibilities of utilising the phenomenon in producing dye-images was at once realised, and by simply removing the black silver-image in a suitable solvent of silver, such as Farmer's reducer, after bleaching as above, a reversed dye-image was obtained, that is, starting with a positive silver-image a negative dye-image was obtained.

In the following experiments images on motion-picture film were used though the methods are applicable to any gelatine silver-image.

Nature of the Dyes Employed

The effect under consideration was discovered when using methylene blue, but on testing a large number of other dyes it was found that dyes such as methylene green and, in general, dyes which are readily reduced to the leuco base can be used also.

The Bleaching-Bath

It was found that two methods of procedure are possible as follows:—

1. Bleach the image in a mixture of the dye and bleaching-bath.
2. First dye or tint the film and then bleach.

1. The following acid-hypo bleaching-bath was used in the preliminary experiments.

Acid Hardener

Alum.....	56 grams
Sodium Sulphite.....	56 grams
Acetic Acid 28%.....	400 cc.
Water to.....	1 liter
For use: Hypo (25% solution) ..	100 vols.
Acid Hardener.....	5 vols.

In order to determine the active bleaching-agent in this bath, tests were made with mixtures of dye and the individual ingredients in various combinations and it was found that hypo in combination with hydrogen - ions is the active

bleaching-agent. Thus, the following mixtures, as enumerated below, are inactive:

Hypo + Dye
Dye + Acid
Dye + Sodium bisulphite

while, on immersing an image in a mixture of dye + hypo + acetic acid or sodium bi-sulphite or acid hardener, good results are obtained.

The following bleaching-bath was found to give the best results:

Methylene blue.....	1 gram
Hypo.....	5 grams
Acid-Hardener.....	2.5 cc.
Water to.....	100 cc.

On immersing a positive image in this solution for three or four minutes, the dye enters the highlights, whereas the shadows remain clear; so that on washing and removing the silver-image, as described below, a negative dye-image is obtained.

2. By first tinting the film and then bleaching, stronger dye-images were obtained as follows:

Immerse the film for two or three minutes in the following bath and rinse:

Methylene blue.....	1 gram
Ammonia (concentrated).....	0.1 cc.
Water to.....	100 cc.

Now bleach in the following acid fixing-bath until the shadows are black and free of dye:

Hypo.....	5 grams
Acid-Hardener.....	2.5 cc.
Water to.....	100 cc.

After bleaching, wash for about ten minutes in running water and remove the silver-image.

Time of Bleaching

When using method 2—if the bleaching is prolonged beyond a certain point—the dye in the highlights commences to bleach out until, on prolonged bleaching, all the dye disappears. On subsequently removing the silver—so as to reverse the image—very peculiar line-images are obtained, if the bleaching is prolonged beyond the point when all the dye is bleached in the shadows. It is better to bleach in a weaker bath than in a strong one, since this permits of greater latitude in working. With the above formula from one to two minutes is an average bleaching time. Around normal room-temperatures (65° to 75° F.) small changes in temperature have very little effect on the rate of bleaching.



CHRISTMAS-MORNING
W. B. POST

Removal of the Silver-Image

After bleaching, the film should be washed about ten minutes in running water and immersed in the following bath of the Farmer's reducer.

Hypo.....	2.5 grams
Potassium Ferricyanide.....	1 gram
Water to.....	100 cc.

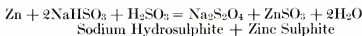
After all the silver is removed, the film should be washed for five or ten minutes and dried.

Other silver-solvents, such as a solution of iodine in potassium cyanide, iodine in thiourea, potassium ferricyanide and ammonium thio-cyanate, can be used in place of the Farmer's reducer.

Theory of the Process

The action of the bleaching-bath is apparently to reduce the dye to the colorless leuco base in the region of the silver-image, the leuco base washing out of the gelatine more rapidly than the dye. This leaves a reversed dye-image with black silver in the highlights, so that on removing this silver a reversed dye-image is obtained.

The precise action between silver and acid hypo in the presence of methylene blue is difficult to explain. It was at first considered that the reaction between the silver-image and the acid-hypo is analogous to that between zinc and sodium bisulphite to produce zinc hydrosulphite and sodium hydrosulphite as represented by the following equation:



However, it was considered that silver is too noble a metal for the above reaction to occur in the absence of hypo, and this was confirmed by the following experiment.

Finely divided metallic silver was heated for thirty minutes to boiling with a twenty-five per cent solution of sodium bisulphite to which was added one per cent of acetic acid. On adding a little of the supernatant liquid to a solution of methylene blue, the dye was not decolorised though, on repeating the experiment with the addition of hypo to the acid bisulphite, the liquid decolorised the methylene blue at once, thus indicating that a powerful reducing-agent was produced. A blank experiment, which consisted in heating together hypo and acid bisulphite, showed that this mixture alone does not reduce the dye except in presence of silver.

These experiments confirm the practical photographic results, namely, that hypo is necessary for the reaction between the silver and the acid bisulphite to occur. In the case of zinc, the presence of hypo is not necessary.

The exact chemical nature of the substance formed which reduces the dye has not been discovered. During bleaching of the tinted film in acid hypo, the silver-image turns yellowish brown and its light-transmitting power is visibly increased. On treating the bleached image with a thirty per cent hypo solution or five per cent potassium cyanide some of the image is removed, leaving a residual image apparently of silver which is soluble only in silver solvents—such as Farmer's reducer.

The above explanation raises the question as to whether any reaction takes place in the ordinary course of fixing out a silver-image in an acid fixing-bath in the absence of methylene blue. Certainly no visible change in the image occurs at normal temperatures in two or three minutes with no apparent change of color. Previous experiments have shown that silver dissolves slowly in a solution of hypo in the presence of air (the oxidiser), so that if methylene blue is regarded as the oxidiser, the analogy in the case of the oxidation of silver by a mixture of acid hypo and methylene blue is complete.

A number of other bleaching-baths can be used in place of the acid hypo such as an acid solution of stannous chloride, acid amidol, and acid cerous nitrate.

Several difficulties were met with in producing good dye-images as follows:

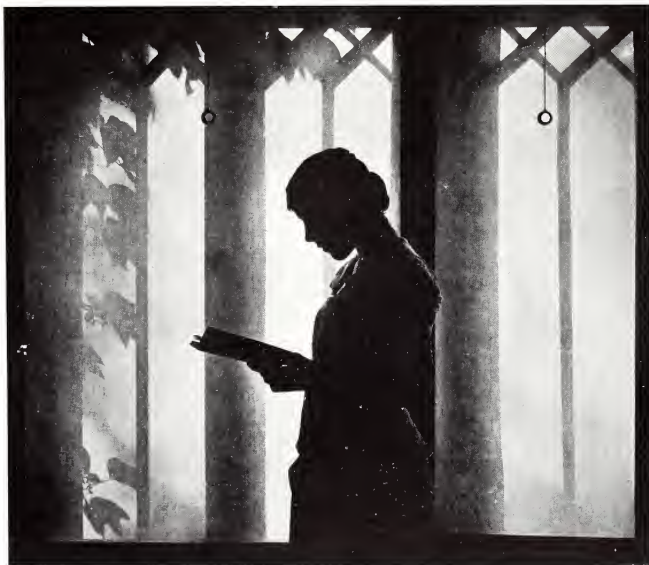
1. Bleeding of the Dye

After dyeing in a plain solution of the dye, rinsing and bleaching, it was found that the dye washed out readily, in fact, almost as readily as the leuco base so that weak dye-images were obtained. Attempts were, therefore, made to mordant the dye as follows:

A. By mordanting after dyeing by means of known mordants for basic dyes such as phosphotungstic acid and tannic acid. After dyeing the film was given a short immersion in a one per cent solution of phosphotungstic acid (which mordanted the dye almost completely) and then washed for ten minutes. This treatment resulted in patchy images and it was not easy to subsequently remove the silver-image in Farmer's reducer.

B. By mordanting after bleaching and washing and before removing the silver better results were obtained, though some streaks appeared after removing the silver as above.

C. The best results were obtained by adding ammonia to the dye-bath in the first place which increases the rate of dyeing and retards the rate of bleeding on washing.



SILHOUETTE-STUDY

WILLIAM LUDLUM

2. Re-oxidation of the Leuco Base

The leuco base of methylene blue is readily oxidised back again to the dye by suitable oxidising agents and under certain conditions with certain bleaching-baths and washing in water containing dissolved air, after bleaching and washing the leuco base is oxidised back to the dye so that the film assumes the tinted condition again. The addition of a trace of sodium bisulphite to the wash-water tended to retard this oxidation.

Re-oxidation also occurs in the Farmer's reducer, if all the leuco base has not been washed out after bleaching, which explains the necessity for washing after bleaching in the acid-hypo.

Positive Dye-Images

During washing of the image after bleaching in the Farmer's reducer, it was observed that in some instances a positive image was obtained—that is, the leuco base was mordanted to the silver-image and was re-oxidised to the dye

while the dye in the highlights washed out, thus producing a positive image from a positive.

The mordant, in this case, is silver ferrocyanide formed in the Farmer's reducer. A silver-image when bleached in a mixture of ferrocyanide and a trace of hypo is converted to silver ferrocyanide, which in a finely divided condition is a powerful mordant for basic dyes. If, therefore, after bleaching, the image is only slightly washed the leuco base remains, and on bleaching in the Farmer's reducer is mordanted to the silver ferrocyanide image, and is oxidised to the dye. On prolonged washing, the methylene blue is washed out of the highlights leaving a positive dye-image.

Toning and Tinting

Interesting effects are obtained by dyeing, bleaching and washing, and without removing the silver, immersing in a uranium toning-bath or by dye-toning the silver in the usual way. The result is that of a toned silver-image with the

highlights tinted. This, of course, is distinct from the usual toned and tinted effect where the dye-layer covers the entire film.

Line-effects are produced by prolonging the bleaching in the acid-hypo and subsequently toning the silver-image as above. The effect is that of a toned silver-image with line-lighting and tinted highlights.

Odd tinted effects are obtained by merely dyeing and bleaching and washing, and prolonging the bleaching time a little above the normal.

Summary

Reversed dye-images can be obtained by first dyeing a gelatine silver-image in a dye which is capable of being reduced to the leuco base which is more readily washed out of gelatine than the

dye, and after tinting, bleaching in an ordinary acid-hypo bath, washing, and subsequently removing the silver-image in a solvent of silver, such as the Farmer's reducer. The excellence of the results depends largely on the correct time of bleaching and on the thoroughness of washing after bleaching. If the washing is not thorough—on immersing in the Farmer's reducer—the leuco base is mordanted to the silver ferrocyanide formed so that, on prolonged washing, the dye washes out of the highlights leaving a positive mordanted dye-image.

The author is indebted to Mr. D. S. Mungillo for assistance in carrying out the various experiments. [Communication No. 97 from the Research Laboratory of the Eastman Kodak Company, Rochester, New York, U. S. A.]

Use of the Mirror in Portrait-Photography



IN portrait-photography the mirror finds only limited employment, when sometimes a feminine customer expresses a wish to be photographed standing before one; but otherwise this indispensable article in daily life receives but little attention. This is wrong, however, as will be seen by the following lines. Already, in the older editions of the well-known little book of Schnauss, "Photographic Pastimes," we find described among other trifles, the making of multiple photographs by means of two mirrors placed at an angle—a process that has again and again been rediscovered and repeatedly patented or otherwise protected. Mr. G. Paboudgian, of Constantinople, places two mirrors of different lengths, without frames, with the mirror-faces parallel to one another, places the sitter between the mirrors, and, by a proper arrangement of the camera, obtains a multiple photograph. If three mirrors are placed together in a triangle with the reflecting-sides turned in, two or three persons will suffice to give in the mirror a whole crowd of people which can be used in such a way that from one such self-moving model one can obtain several faces. H. Kessler worked up, by the help of an interior mirror, a process for producing pictures showing a larger field of view than is possible with ordinary photographs. By this method, mirrors placed at an angle of forty-five degrees in front of the camera, and the picture reflected in the mirror is photographed, giving a picture free of perspective exaggeration. This method can also be used

very successfully at short focal distance. In the same way, mirrors are used in library photographing and also in the reversing-method in making photographic reproductions, for which purpose highly polished mirrors of magnalium are used.

The mirror has another ingenious application in the telephoto camera "Vega" of Vautier-Dufour of Geneva, in which the long focal distance of the lens is "broken" by a mirror introduced in the interior of the camera and the image reflected on the sensitive plate. We would also mention the mirror-arrangement, "Stereon," originating in England, and the production of stereoscopic views with a single lens made possible by the use of a mirror.

In the reflex camera, the mirror permits watching the subject until the shutter is released. In Iser's "Spiegelatelier," as also in the "Globus" mirror-camera (Moecke's patent), on the other hand, the model can place himself in whatever may seem to him the best pose. In the last two cases, the mirror has no direct photographic value, as it is here merely an accessory serving the convenience of the sitter.

In following out the Kessler method, the Vienna photographer, Franz Löwy, found that the mirror serves not only as a shortener of focal distance or as a substitute for a wide-angle lens, but, by proper posing of the model on the one hand and of the mirror and the camera on the other, pictures with quite unique lighting can be made, in which the skill and good taste of the operator play quite an important part. In many cases, also, the action of mirrors in



SNOWCLAD MT, WASHINGTON, N.H.

AMOS A. FALLS

lighting up shadows can be brought into service; in short, the photographer will here find a fertile field ready for exploiting, in which experiments can be recommended by which, with the present apparently cumbersome methods, not only the operator himself, but his mirrored image can be photographed.

Naturally, with the present inordinately high prices of working-materials, one should first study up the effects on the groundglass and see what can be done. The mirror-photographs made by Löwy show a certain softness (not diffusion) and great plasticity, and at the same time an astonishing richness of tone is to be observed which can be utilised to advantage in pictures containing highly illuminated objects. For instance, the model to be photographed is a light-blond lady in white, lace-trimmed clothes, standing before a brightly lighted window; the walls of the room are white or light-colored. A direct exposure in these circumstances with an ordinary plate would give only a mass of halation and other faults. But if the model is placed before a mirror and the reflected image is photographed, the absence of halation and its

other favorable qualities will at once convince of the value of mirror-photography.

Of course, the mirror-pictures will be reversed from right to left, which in many cases is of little importance; but if correct position of the sides is insisted upon—as by persons in uniform or with decorations—this can be remedied by placing the sensitive plate with the glass-side towards the front (which also acts to prevent halation) and bringing the plateholder the thickness of the glass nearer the lens.

Care should also be taken that neither the camera or other apparatus, nor the operator should appear in the mirror. This can be effected by the placing of the camera. It is recommended that the mirror be as perfectly flat as possible, of colorless glass and at most one centimeter in thickness, as with a thicker mirror there are apt to be double contours. As in the mirror, a larger field of view is obtained, with a shorter focal distance, the sitter can be placed in a comparatively deep and apparently distant interior. Besides, the operator is in a position to utilise all kinds of light-effects, which otherwise would be difficult.—*Atelier*.

An Efficient Developing-Tank

BERTHA MOREY



THE traveling photographer will find a light-weight developing-box of the greatest convenience. While planned, primarily, for any size up to 5 x 7 cut films, the developing-

must be slipped halfway through the openings of the holder.

One half of the pattern of the holder is given in Illustration A. The twelve-film carrier may be made by merely doubling the pattern.

PATTERN FOR FILM-CARRIER.

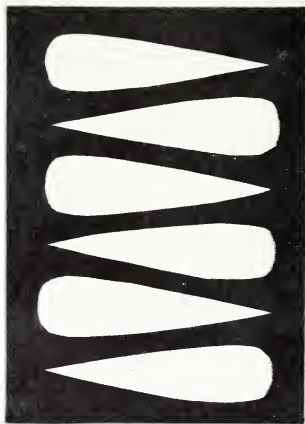


FIGURE A

box may be used for cartridge-films by cutting before developing. Very small films may be handled more easily if two or three are cut off at a time. When using this tank, the black paper must be placed in the holder with the film as it is in many of the other tanks. The films

The best holder is made from a piece of about gauge-15 aluminum. The best box is of aluminum, although one of light wood, and lined with oilcloth, will answer every purpose. If wood is used, it is well to employ three-ply bass-wood, heavily shellacked, as this will last indefi-

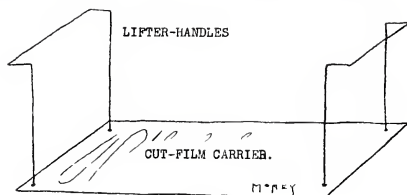


FIGURE B

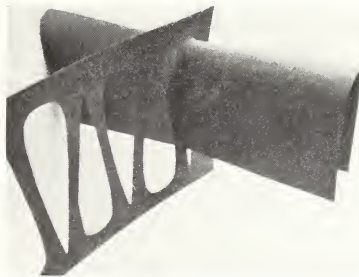


FIGURE C

nately. The original box has a lining that has been in use four years. It is well, however, to test the lining occasionally for leaks, as it is dangerous to permit the developer to leak out.

For developing twelve 5 x 7 films, a box 3½ x 9 inches, in horizontal dimensions, and eight inches, in depth, will be found most practicable. The holder may be provided with a lifter—such as is shown in the pen-sketch—although this feature is not really necessary. Aluminum-wire offers the best material for this device.

The box is used for fixing and washing. After

the films are fixed, allow the water to run slowly from a faucet into the box, making sure that the stream does not fall directly upon the surface of the films. In case no faucet is available, the water may be poured alternately in and out, until the process is complete. Another method consists in suspending the loaded holder, with a cork-bob, in a bucket or barrel of water, or in a lake or stream, according to the circumstances of the case. A final, thorough rinsing, after removal from the holder and the black backing-paper, will complete the process.

A Method of Correcting Harsh and Halated Negatives



HARSH negative is an underexposed and overdeveloped one of a contrastily lit subject. Such a negative can be made without the underexposure, but as this would merely mean culpably bad development I will pass over fully-exposed negatives.

To obtain decent prints from a negative with clogged highlights and empty shadows is difficult; to get perfect ones, impossible, particularly if halation is added to the harshness.

In studio work harsh negatives can be avoided by using a full and well-diffused light, but in home-portraiture and commercial work ideal light cannot always be had—the prevailing light as often as not falling in a wrong direction—to illuminate one or two patches of the subject intensely while other parts are in darkness. The different intensities of light reflected from two parts of a subject may be beyond the power of

any emulsion to register correctly in one exposure, and the operator must perforce do one of two things, if not both. He must overexpose the highlights or underexpose the shadows. With movable subjects the former course is not always practicable, and the resulting underexposure is often the root cause of a harsh negative, by inducing overdevelopment in the vain hope of getting shadow detail. Harsh negatives can be avoided in any circumstances by tank-development with a suitable formula if sufficient attention is given to details like time and temperature, but the right system for negatives of contrastily lit subjects might not be the best for any other kind.

But like all preventable things, harsh negatives will always occur, and a cure is often useful. The following method is based on the fact that highlight density is of a greater depth in the gelatine of a negative than shadow-detail is,



HANDFUL OF MISCHIEF RENÉ P. PIPERCUX

and halation is allowed for on account of it being deeper still. It will be obvious that the removal of all silver in the lower stratum leaves the highlights appreciably thinner and without halation, while not affecting the shadow-detail. This can be done by bleaching, followed by part re-development and fixing, and any of the solutions in common use will serve. I have found advantages, however, in using (1) a bleacher containing bichromate and (2) an amidol developer, the formulae being as follows:—

Bleacher.

Potass ferricyanide.....	1 dr.
Potass bromide.....	1 dr.
Potass bichromate.....	1 dr.
Water.....	5 ozs.

Developer.

Sodium sulphite.....	½ oz.
Amidol.....	20 grs.
Water.....	20 ozs.

Fixer.

Hypo.....	4 ozs.
Water.....	20 ozs.

Before treatment, a negative must be thoroughly fixed and free of hypo. Bleaching can be carried out in daylight and proceeded with until the whole of the deposit has changed color, when viewed from the reverse side of the negative. A short rinse is then given and the negative is placed in a clean tray, the developer being poured smartly on to the center. Dropping the

negative into a trayful of developer will result in uneven action. Development is carried out in daylight and the negative inspected from time to time on the reverse side, and when all but the over-densities has blackened the negative is rinsed again and transferred to the fixing. If all the operations are carried out carefully and correctly the following actions will take place. The silver-image will be converted to one, both re-developable and soluble in hypo. The top layers of the image, *i.e.*, the shadow-detail and moderate densities of the highlights and gradations between these, will be re-developed, and at the same time brightened up to some extent by the action of the bichromate. The surplus density of the highlights and also any halation, being either not re-developed or only re-developed to a slight extent, will remain largely soluble in hypo and disappear in the fixing-bath, leaving a negative which is anything but harsh.

Some possible mishaps with the process are: insufficient bleaching, which leaves the unwanted deposits untouched and irremovable; over-bleaching, which may result in stain or obscure complications; insufficient re-development, which leaves the image proper susceptible to hypo, and may mean the loss of the negative; overdevelopment, which leaves the negative as bad as it was originally. In the last case the process can be repeated after washing.

THEMIST—*British Journal.*

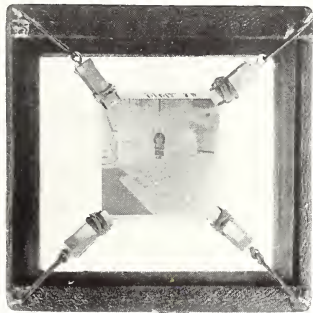
A Simple Film Negative-Holder

H. P. T. MATTE



THAT amateur, who is obliged to work in all sorts of places, has not wished that the film-negative from which he makes lantern-slides or enlargements could be supported in the air, so to speak, in order to eliminate some of the surfaces which must be kept clean from the

the carrier, holder or camera-back, or whatever you use for enlarging or copying, set a small screw-eye. With eight pieces of wood about one inch long, one-quarter inch wide and one eighth inch thick, construct four clips, as elaborately or as simply as your taste dictates. However, in order to provide a fulcrum for its



NEGATIVE AND FRAME

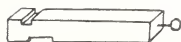
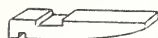
H. P. T. MATTE

particles of dust that persist in sticking to the glass-plates used in the film-holders?

It is very fascinating, after a vigorous cleaning, to watch the particles of dust settle upon the electrified glass—coming, apparently, from nowhere. Spotting is also an interesting occupation. But who wants to do much of that after the technique has been mastered?

Instead of putting the film between two pieces of glass, do this: In each of the four corners of

operation, it is necessary that one of the strips of wood composing each clip be rounded on one side so that it is thicker in the middle than at the ends. Now insert a screw-eye into the end of the flat strip, and fasten the two pieces together by means of a rubber band. Four more bands are needed to attach the clips to the holder. It will be found that the device is easily adjustable, so that the negative can be centered without difficulty. It is practical and effective.



NEGATIVE-CLIPS

H. P. T. MATTE

Still-Life Photography

An Aid to the Study of Pictorial Composition

WILLIAM S. DAVIS



IF one may judge by visible results, comparatively few workers devote much, if any, attention to still-life groups. This seems unfortunate, for in addition to the pictorial beauty which can be expressed by a skillful arrangement and lighting of still-life material, the making of a group, and properly lighting it, affords valuable practice in composition.

With many kinds of subjects, it is necessary to make the best of things as they are; for, in the case of material which does not allow of re-arrangement, one can select only what appears best after viewing it from various angles. However, in making still-life studies, the worker is absolutely free to create an original composition, by selecting the objects, background, and other accessories used, and by arranging the whole in any manner desired, so that if the result is not satisfactory he has only himself to blame. Because the photographer must assume full responsibility for the make-up of the composition, the effect of one part upon another—as various groupings and changes in lighting are tried—is likely to be studied with care; and, all parts being under control, it is possible to do this in a leisurely manner; allowing time for thoughtful analysis. It is also an interesting experiment to find how many different effects can be worked out by re-arrangement of the same material, and the practice thus gained will stand the worker in good stead frequently when he deals with subjects of totally different character. In the final analysis, all compositions in monochrome must be produced by means of line and tone, and the underlying principle of rhythm and balance is the same whatever the objects may be that go to form the lines and tonal spaces within the boundaries of the composition.

Although, as just suggested, the effect upon the structure of a composition is not dependent upon the kind of material that enters into it, this is not to be interpreted to mean that a heterogeneous combination of objects can be thrown together and produce a pleasing, æsthetic impression; for, so long as different kinds of material bring up definite associations or ideas to an intelligent spectator, just so long will this fact have to be considered in the selection of suitably related material to produce what might

be called a logical composition—one which will convey a thought of some kind in addition to the abstract beauty inherent in a well-designed pattern, such as exists in any good conventionalised design. I know well that this is scorned by the extreme element of the so-called modern school of painters and photographers who hold that it is quite immaterial what relation objects bear to one another in an intellectual sense—or even whether it be possible to discover what they are—provided the units make what may be considered a satisfactory pattern or design. Following this practice to a fitting conclusion, one might frame a rug or piece of figured linoleum and hang it upon the wall for an ornament! However, the consensus of cultivated opinion demands that a pictorial composition shall possess both abstract beauty—which comes from a harmonious effect of interestingly disposed lines and tonal masses of varying depth—and the element of interest that is created when the material selected, or transient effect introduced, suggests a definite idea or impression.

Making direct application of the above to the class of compositions now under consideration, one expects in a still-life picture of a finished character—one which is more than a technical exercise in composition—to find objects grouped together which possess some logical association of interest, or be such as might naturally come together in a casual way; otherwise the combination will look stilted and artificial. On the same principle, the placing of selected material in a skillfully composed group should *seem* to be so natural as not to suggest the deliberate placing of every unit, although as a matter of fact, the latter must be done usually, for one seldom comes upon material so placed that it will compose a good picture without some changes being made. Many an idea to produce a spontaneous effect may be gained by observing the accidental arrangement of objects in everyday use, and these will also suggest “motives” for pictures.

The most ordinary, simple material is sufficient to form a foundation to build a composition upon; but the creation of a beautiful result lies in the arrangement and lighting. Although it is not worth while to attempt an extended list of possible material, one may suggest, as a few of the things which can be utilised, viz.;



FRUITS OF THE HARVEST

WILLIAM S. DAVIS

lamps, candlesticks, clocks, china-and-glass ware, copper-and-pewterware; cooking-utensils, a tea-service, plaster-casts, books, writing-materials, fruits, vegetables and flowers.

No greater number of objects, however appropriate in character, should be introduced in a single composition than is required to express the idea in mind and to give satisfactory balance of line and tone to the composition. Simplicity makes for strength and unity of expression—a multiplicity of objects distracts the eye and breaks up the tone-spotting into a confusing jumble, unless handled with exceptional skill.

In considering the material, do not forget that the background and base upon which the objects are arranged are just as important as the objects themselves; for they fill the spaces not taken up by the latter, and bring in tones which react upon every detail. This tonal relation cannot be judged wholly by the local tone-values of each unit, as the quality and angle of illumination play numberless tricks in altering the relationship by producing highlights and shadows of varying intensity. Reflections, such as occur in polished ware, a table-top, or in a mirror—often add much to the attractiveness of the

effect. As lights, shadows and reflections, all affect the size and location of the tone-masses formed by the objects alone, arrangement of the latter is dependent upon these transient effects, and it is always interesting to observe how completely a change in the quality or angle of illumination can alter the grouping of tones.

By utilising material of a suitable nature, subjects can be found indoors or out; by day and artificial-light. One may work by diffused daylight, depending mainly upon local differences in the tonality of the material to obtain a proper balance of light and dark tone; or, place the subject in full sunshine, either out-of-doors, or by a sunny window where a sunbeam will produce a local effect of sunlight and shadow. An entirely different variety of effects is obtainable by utilising candles, electricity, or shaded kerosene table-lamps. However, most of the artificial-lighting effects are made best by the aid of weak daylight, burning magnesium-ribbon or in conjunction with the local artificial-light effect, to reduce the exposure and to soften the intensity of the shadows.

Because the interest in still-life photography to the worker lies so much in the opportunity



OLD PEWTER

WILLIAM S. DAVIS

for individual experimentation, it hardly seems wise to run the risk of circumscribing any one's efforts in this direction by attempting to lay down rules for grouping or lighting, even though of a general nature. Nevertheless, by way of conveying some suggestions as to technique and the use of material in the study of pictorial composition, I will explain how the illustrations were made and indicate the reasons for grouping the material as in the manner shown.

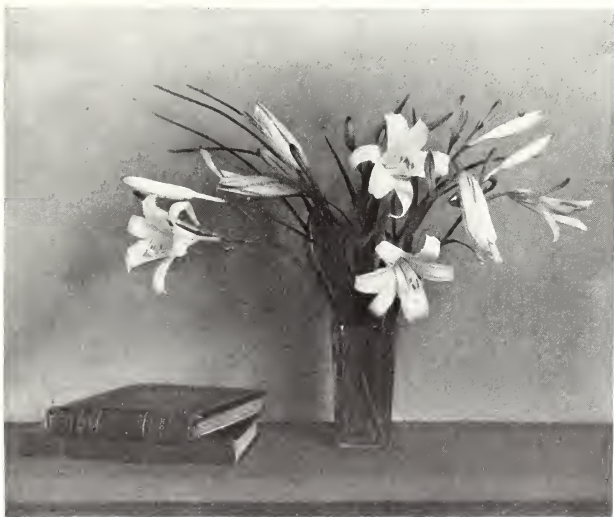
Let us take first the outdoor-subject, "Fruits of the Harvest." We have here, as material, a basket, some dry ears of corn in the husk, a large pumpkin, and a few apples, all of which might naturally be found gathered together. The bare ground and a rough board-fence furnished the setting, the latter in shadow, and the direct light upon the objects from the sky above was diffused by thin clouds. In local-color the husks of the corn were lightest; but the smooth, round surfaces of the apples reflected enough light to have them utilised as spots of light tone. The interior and under-side of the basket, and the dark side of the pumpkin, provided the bulk of the dark tones, and most of the halftones came from the fence and ground, both of which were nearly of the same value. By placing the basket on edge, the lighted rim

formed a curved line leading down to the corn which was scattered far enough along to lead the eye to the spots of light upon the apples at the left edge of the composition, the uniformity of this line being varied by the light accent upon the pumpkin. The distribution of darker tones was varied, starting with the shadow at the right, under the basket, and extended by the small accents under the individual ears of corn to the darker spots made by the shaded parts of the apples; the parallelism of this arrangement being offset by the dark tone-spot upon a part of the pumpkin, and the mass of graded tone inside the basket.

"Old Pewter," naturally, was made indoors; the material being arranged upon a dark, polished table about three feet from a south window on a cloudy afternoon; this arrangement gave a soft lighting, as I wished to avoid such sharp lighting upon the rounded surfaces as would cause loss of texture and the characteristic tone of old pewter. It will be noticed that the eye is drawn to the lamp—dating back to the whale-oil period of illuminants—by the highlights upon it, which form the strongest accents of light tone in the picture, due to its having a more highly polished surface than the other objects. The reflections upon the table-top, and lights upon the rim of

the plate and parts of the teapot, although secondary to the accents upon the lamp, are close enough in value to avoid undue emphasis upon the latter, which would have interfered with the pattern of the composition as a whole. As one rule of good composition is never to place the main accent, or principal object of interest, in the exact center, the lamp was kept a little to one side; but the tones of this were balanced by the greater area of moderately light tones in

to the left would have balanced the distribution of light and dark tone within the picture-space, but likewise it would have caused a division of interest in the grouping of the objects and made it appear isolated from the rest of the material. The dark tone created by the cast shadow of the plate should not be overlooked. This connects with the dark tone of the table-top, increases the tonal accent at the point of main interest and fixes the depth of perspective in the picture



FROM THE GARDEN

WILLIAM S. DAVIS

the plate and teapot. Placing the plate back of the latter reduced the number of separate tone-spots and provided a background which set off to advantage the shaded parts of the teapot, and at the same time the full circle of the plate's rim was broken by the projecting curve of the teapot's handle. Although the general arrangement of the pewter-ware seemed to be satisfactory after this was done, the difference in bulk between the mass of tone formed by the plate and teapot compared with the lamp appeared to need some correction, in consequence the book which is seen at the extreme left of the picture was introduced. Moving the lamp more

by enabling the observer to judge the position of the background relatively to that of the objects.

"From the Garden" does not call for much comment. As can be seen, the buds, flower-petals, and leaves of the lemon-lilies furnish the main pattern against the background of halftone, although the cast shadows upon the latter are of value in much the same way as the cast shadow of the plate in "Old Pewter." The simple device of using books as accessories serves, in this instance, to balance the dark mass of stems in the flower-holder, and also to cut the straight horizontal line which marks the division



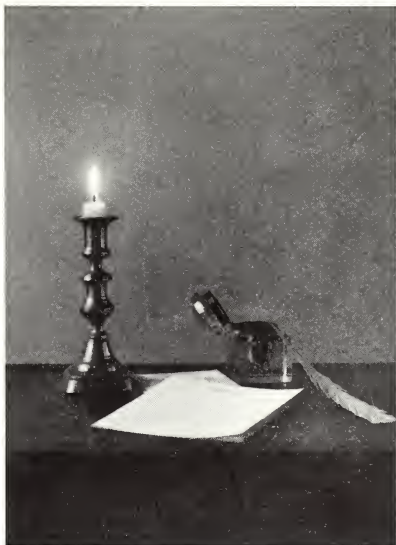
BY THE WINDOW

WILLIAM S. DAVIS

between the background and shelf. The shelf upon which the group was arranged was about the height of an ordinary mantel from the floor, and approximately six feet from a good-sized, oblong-shaped north-light in the wall at right-angles to it, that gave what might be called a side- and three-quarter-front lighting of soft quality.

"By the Window" is a study in lighting-effects, a mass of bright-colored cactus-dahlias in a yellow vase furnishing the principal element of interest. To provide the kind of background which would best emphasise the play of light and shadow among the petals of the flowers, I decided to let a little of the window—from which the main source of light was derived—form a part of it. However, to subdue the intensity of illumination and to lessen the abrupt contrast of tone between the window and wall alongside,

the former was draped with a soft, white fabric, this being extended over a part of the wall-space, as well, and this gave a middle-tint between the extremes of light and dark tone. The part of wall below the window-sill in combination with that to the right made an L-shaped section of dark tone. The light-space that filled the remainder of the background was balanced by the light-tones in the vase, slightly to the right of the center; and the light falling finally upon the large drawing-board which served as a table for the bouquet. With this degree of tone-balance obtained, the rest became a matter of getting pleasing tone-spotting of the flowers against the light and dark parts of the background. Some diffused light from more distant windows was utilised to soften the depth of tone in the shadows, although care was taken not to let this secondary lighting be strong enough to produce cross-



BY THE CANDLE'S GLOW

WILLIAM S. DAVIS

shadows. A liberal exposure was given, which is always necessary when working against-the-light, to obtain a harmonious rendering of strong tone-values.

"By the Candle's Glow" is suggestive of what can be done easily in creating artificial-light effects. To produce successfully the illusion of such local illumination as comes from a near-by source of light a little thought is required in placing light-toned objects naturally where the most light would fall. In the present instance the effect of illumination from the candle-flame is really due to the fact that the note-paper was laid where the strongest light from the candle would fall naturally, the ink-well, as well, being so placed as to reflect a few catch-lights; for, as a matter of fact, the actinic power of a candle's yellow flame is too weak to make very much of an impression by itself, unless an excessively long exposure is given, during which time the candle would become less in height and the flicker of the flame be likely to give too

blurred a result. For these reasons, I used weak daylight as the main source of illumination, taking care to have it so thoroughly diffused as not to produce cast shadows. After giving what I thought was sufficient exposure to register the amount of detail which the eye would see by candle-light, I closed the shutter, lit the candle, and made a second exposure of short duration of the flame itself.

In cases where a shaded light is used, it is sometimes practicable to substitute a spiral of magnesium-ribbon in place of the ordinary burner, or bulb, and obtain a result with little or no help from daylight. This is a field where one may exercise his ingenuity in many ways.

I have not offered advice upon such matters as plates, filters and other equipment, assuming that color-sensitive emulsions, orthochromatic or panchromatic plates and suitable ray-filters, will be used when necessary. Good opportunities are afforded in this field for excellent technical and helpful artistic practice.

Fundamentals of Print-Criticism and Appreciation

Part One.—The Functions of the Critic

AUGUST KRUG



VERY photographer has his own severest critic is a slogan which rolls trippingly off the tongue: a consummation which, however devoutly wished, seems not likely of complete fulfillment for some time to come. The photographer who can view his own work impersonally is a rarity, but his kind is increasing. This series of articles will assist, it is hoped, through their treatment of the foundations underlying this important branch of photography, the aspiring critic and the self-criticising photographer to a comprehension of their opportunities and their responsibilities. The critic we shall have always with us, which brings us to our theme.

"A critic," I was told by nine-year-old Bobby, "is a little black bug which makes a noise by rubbing its hind legs together." Of course, I set Bobby right, but the thought stayed with me. What and why is the critic of photographs?

Let us see what the late William Dean Howells thought a critic should be: "It is hard for the critic to understand that it is really his business to classify and analyse the fruits of the human mind very much as the naturalist classifies the objects of his study, rather than to praise or blame them: that there is a measure of the same absurdity in his trampling on a poem, a novel, an essay (or a *photograph*) that does not please him as in a botanist grinding a plant under foot because he does not find it pretty. He does not conceive that it is his business rather to identify the species, and then explain how and where the specimen is imperfect and irregular."

Mr. Howells limits the functions of the literary critic to classification and analysis. The critic of photographs has in addition the duty of suggestion. He must be capable of seeing latent possibilities in a print and to point them out clearly. It is more than likely that prints will at times be shown him which have at first sight nothing to commend them. The temptation will be to slight and condemn them: the critic should remember, however, that his best services are required in just such circumstances. The advanced worker who turns out consistently good prints, generally does not care a hoot about the opinions of the critic. The people who really appreciate true criticism are they who need it most—the beginners and earnest

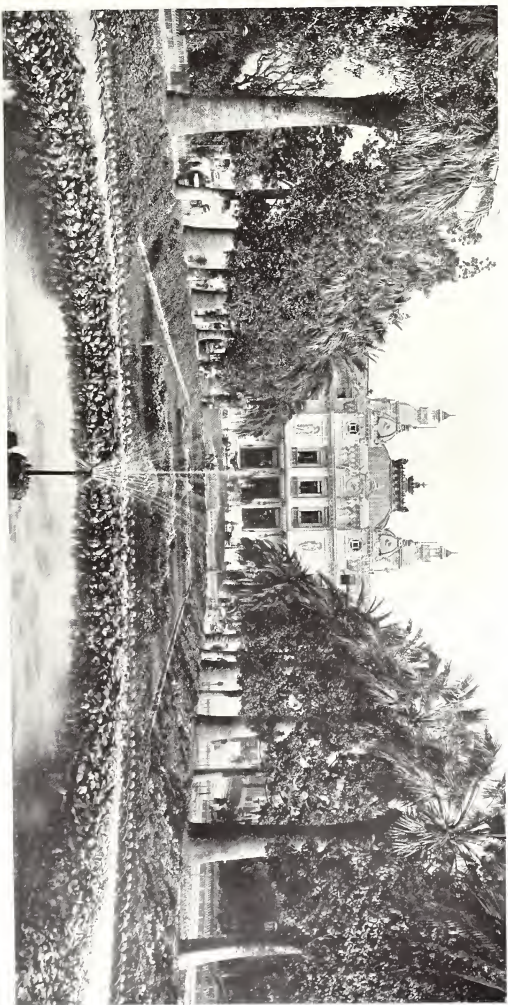
workers who feel that they could effect improvement in their work. The ability to suggest remedies, therefore, and to point out methods and processes of advantage, is an invaluable asset to any critic.

Mr. Howells perceived, too, that in the field of literary endeavor, of which he was writing, the critic was prone to censure and condemn rather than to criticise. Critics in all fields of work manifest the same tendency. The cause is lack of cultivation of the critical faculty: narrow-mindedness—a mild bigotry.

The critical faculty, latent in every human being, is assertive in the great majority. Its proper development, however, is often retarded by prejudices which the individual critic has formed—prejudices which he is unable to discard when passing judgment. Despite its universality, the critical faculty is seldom cultivated; the uncultivated criticism, moreover, is invariably unfair.

The very word "criticism" has come to imply adverse comment, whereas its etymology and original meaning convey the idea of careful weighing and classification (discernment) of the article under consideration. It is common to see critics requested to make their remarks "constructive,"—every criticism ought to be.

Although it is given to but few to have the critical faculty developed to a proper degree, it responds readily to systematic treatment and cultivation. It is easily trained to rise above mere prejudice in its appraisal of merits and defects of pie, poem or photograph. How can this cultivation be attained? In just the same manner as refinement in anything else worth while is secured. It is true that culture may be absorbed unconsciously; but it is a slow process—thus, it may be possible to learn how to make good photographs by listening to lectures and reading printed instructions, but it is quicker and more satisfactory to work at it yourself, make mistakes if need be and profit by them. Just so, the best training for the prospective critic is criticism itself. Purely as an exercise, work with prints of all kinds, good and bad. Pick out what you believe to be defects, and give praise where it is due, and there only. Bear in mind that to say "It is rotten," is not criticism, but nastiness. This exercise, it is well to note, may be harmful as well as produc-



CASINO AT MONTE CARLO

COURTESY OF J. K. HODGES

tive of good, if proper care is not taken to have correct standards and some knowledge of the sound technical and artistic sides of photography.

Ability to criticise fairly, then, can be acquired by practice. The most assiduous application and the best intentions in the world, however, will not produce a good critic unless the foundation be sound. A thorough knowledge of the craft is just as necessary to the critic of photographs as to their producer.

The question of the necessary standards will be taken up in the next article. Each is as important as the others, and none can be neglected without detriment. It is obvious, for example, that the finer beauties of many an against-the-light photograph will be lost on the critic of paintings who knows nothing of the technical difficulties involved, whereas the same man will be impressed, perhaps, by a perfectly ordinary cloud-study, which, although almost impossible to the painter, nevertheless is perfectly easy to the camera. Although his art-knowledge might be superior to that of the average photographer, his lack of familiarity with the technical side would tell against him when he criticised photographs. On the other hand, many extremely

successful photographers will never be able to criticise, because they have not the necessary art-knowledge. Right here, we can dispose of the theory that a good photographer is a good critic. As a matter of fact, as we have been trying to bring out, special training is necessary to both ends of the game, and training of one end helps the training of the other not a particle.

We have seen, then, that the critic should be slow to condemn, choosing rather to indicate where faults have been made and to suggest their remedy. He is as slow to award undeserved praise, and the fulsome encomium is unknown to him. He is quick with helpful suggestions, and his understanding of the medium renders the suggestions practical. Give him a good equipment in standards, and a fine appreciation of the worth while in prints will develop. If he can appreciate good photographs, he will be a successful critic of poor ones. He realises that he has a responsibility—not only to the photographer, but to his fellow-critics. With the Golden Rule for his guide, he should bring out the real significance of the tenets of his avocation, which imply helpfulness to the struggling and just praise for meritorious work.

Weather-Conditions and Darkroom-Work



PHOTOGRAPHIC work is greatly influenced by the weather, and though this may not apply to darkroom-work in as large a degree as to outside operations, developing and printing are by no means immune from the effects of climatic changes. The changes that matter are those in temperature and humidity. A drop in temperature is capable of upsetting development and retarding both fixation and washing, while damp can damage paper-stocks and retard drying, and both can affect the operatives' health and energy. The obvious effect of temperature on development is seen in the speed with which the solution acts on exposures. A correctly exposed negative or print that would require X minutes to develop at one temperature, may require 2 or 3X minutes in the same solution at a colder degree. If this is forgotten when developing spools, underdevelopment is almost certain, and in printing it invariably means overexposure, as printers are often deceived into thinking the retarded image is due to underexposure. If the developing-formula contain any appreciable amount of

potassium-bromide, greenish prints are likely to be common, whereas if the restrainer is cut down to the minimum to avoid this, any bare exposures will be apt to stain from prolonged immersion. It is more difficult to gauge exposures when using cold developer than it is with solutions at a constant degree in the neighborhood of 65° F.

With spools we can safely increase the time if it is not possible to keep up the temperature. With the necessary apparatus to heat tanks or dishes and keep them at a fixed temperature, all trouble on this score is done away with; but such apparatus is not in common use—nor, to my knowledge, is it easy to get—and the next best thing is to have the whole workroom kept at a constant heat. In the printing-room this is certainly the best plan of all, but is not practicable everywhere owing to the absence of proper heating-apparatus and, at times, to the uncertainty of fuel-supplies. Adding warm water to solutions is not of much use, as it weakens the solutions and raises the temperature only temporarily.

Where hydrokinone is in use, a further consideration arises. This salt is more susceptible to changes of temperature than is the metol

with which it is usually combined, and an M. Q. formula will not give identical results at different temperatures. On a very cold day, an M. Q. developer is to all intents and purposes a metal developer only, whereas the extreme opposite conditions, by rendering the hydrokinone more active than the metal, cause the developer to act as if an overdose of the former constituent had been put in.

Fixation is as much at the mercy of temperature as is development. I have recollections of a professional darkroom where a regular quantity of printing was turned out all the year 'round. The brands of paper, the formulae and the working-method were constant and all the work was toned. Every winter, thousands of prints were spoiled by double-toning due to imperfect fixation; yet this trouble was unknown on warm days. I mention this case merely as an illustration of the greater difficulty of fixing in cold solution, not to argue that proper fixation is not possible under these conditions, because it is, only it requires a greater amount of care and supervision. In this case, *the addition of a little hot water from time to time is of service, for the strength of a fixing-bath need not be kept within rigid limits and weak, warm hypo is better than hypo that is strong, but very cold.*

It is also useful to decrease the amount of hardener used, as the less hardening gelatine gets the better chance the hypo, and also the washing-water, get of penetrating. Fortunately, the same amount of hardening is not necessary as in the summer, as the gelatine does not get so soft in cold weather.

Temperature affects washing-water in two ways. First, its power of working in and out of the pores of the gelatine and the paper increases with the degree of temperature. This can be demonstrated by dipping a piece of gas-

light or bromide paper in very cold water for a few seconds and an identical piece in very hot water for the same time. Whereas the first will be merely wet, the other will be saturated and perhaps partly disintegrated. Secondly, the hotter the water, the more rapidly will it dissolve chemical salts, therefore the hypo and other unwanted agents and by-products in prints are more rapidly removed in summer than in winter. Certainly, the difference in time necessary to wash prints may not be very great; but it is always wise to take extra care in cold weather.

The effects of humidity are not so obvious or so well defined as those of temperature; nevertheless they are not altogether to be neglected. It is generally accepted that damp destroys sensitive materials; but just what degree of damp becomes unsafe or how long it takes for it to penetrate boxes and wrappings are moot points. I know of two instances where gaslight-papers of different makes were kept in perfect condition for years though very poorly wrapped, and in each case the room was exceptionally dry, and I think that the dryness of the rooms was responsible for the preservation; but of course this would need delicate experimenting to prove beyond doubt. It is certain, though, that a dry atmosphere is the best if one would be on the safe side; and, where big stocks are carried, it is wise to be on the safe side.

In process, humidity of the atmosphere can affect the drying of prints to some extent; but unless the degree of damp be very great, this is not likely to be serious or even noticeable. On the other hand, extreme dryness can cause inconvenience by making prints curl up. This can be circumvented by collecting the prints before they reach the eurling-stage, or, if a drying-machine is used, by economising in heat.—*The Photographic Dealer.*



BUNNIES

KATHERINE BINGHAM



LATE AUTUMN

RAYMOND E. HANSON



EDITORIAL



Preparing Pictorial Groups

IT is not uncommon that a photographic worker is seized with a desire to picture an ambitious theme—something in the nature of a genre-group; but having had no art-training, he fails to make the result artistically pleasing. The figures are posed stiffly or awkwardly, and are not placed properly. At best, the result is a mere record; there is no spontaneity in the portrayal or, of what the camerist is pleased to call, interpretation. If a kindly and competent critic calls attention to these shortcomings, and the worker is sincerely desirous to materialise his conception, the members of the group are asked once more to pose and, perhaps, the second attempt may show considerable improvement. But try as he may, the camerist—ignorant of successful figure-composition—will very likely betray his weakness in some important detail. Now, if the embryo-artist has the ability to draw, even a little, he can save himself considerable trouble and disappointment by making a rough pencil-sketch of his mental group, together with what accessories he may desire, study it, and change it, until the result satisfies him. In arranging his group, he has but to follow his sketch, which, if approved or modified by a competent artist, should serve as a safe guide.

Talking to the Screen

WHEN will lecturers ever learn that, in referring to their illustrations, it is a bad practice to divert the voice and thus materially interrupt their discourse? Many speakers, in pointing out certain features in a screen-picture, will face the screen and talk directly to it, while the poor auditors, unable to catch the meaning of this important part of the lecture, are left in ignorance. Now, the lecturer will create a better impression—with regard to his knowledge of the subject—if he were first to indicate with the pointer the object or detail on the projected picture, map or diagram, then quickly face his audience and go on with his lecture. If he is thoroughly familiar with his subject—as he ought to be—he will not find it necessary to rivet his attention on the projected illustration behind him, or at his side, while speaking. He should be able to form a mental picture of the one on the screen,

and, after a momentary turn of the head—to assure himself that it, and no other illustration, is actually displayed—continue to face his audience. Closing his eyes for a few seconds, may help to bring the particular picture to his mind. In this way, no part of the lecture will be lost. Any interruption, even a spoken hint to the lanternist, is a source of annoyance to the audience, of which the lecturer may be entirely unconscious.

We attended recently a talk on the Dutch masters delivered by a distinguished American painter. On the platform, where the speaker stood, were arranged about forty photographic reproductions of famous Dutch paintings to illustrate the lecture. The speaker was perfectly familiar with each original painting, and yet, when referring to the photographic reproduction, he stood closely before it, so that whatever he said—and in a low voice, too—was entirely inaudible. Thus, about two-thirds of his very interesting and instructive discourse was lost to the audience. A talk of this character is never so satisfactory as when the illustrative pictures or photographs are on a scale sufficiently large as to be easily seen by the audience. Of course, the best way to display them is in the form of lantern-slides, when that is possible.

Toned Lantern-Slides

ONE of the most artistic and agreeable tones of lantern-slides, is the warm-brown tone. And a desirable feature in producing this beautiful tone is that it can be done in the development of the exposed lantern-slide plate. The usual way, is to give a prolonged exposure and use a restraining (bromided) developer. We prepared lantern-slides, in this manner, as long ago as 1885, and, using some of them recently, we found that the original and uniform purity of color had not deteriorated, in the least. It is also true that such slides are superior in tonal quality to those made in the ordinary black tone, and then toned separately. Of course, almost any color can be imparted to a lantern-slide by means of special toning-solutions, the formulas for which may be found in a standard photographic dictionary, in preference to imported toning-compounds, in tablet-form, which very often are made of impure ingredients and yield results that, sooner or later, will prove disappointing.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
367 Boylston Street, Boston, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface are not suitable for reproduction, and should be accompanied by smooth prints on P. O. P., or developing-paper having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. **Be sure to state on the back of every print exactly for what competition it is intended.**

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Architectural Subjects Competition

Closed October 31, 1920

First Prize: Ernest M. Pratt.
Second Prize: P. W. G. Moebus.
Third Prize: Alexander Murray.

Honorable Mention: D. R. Battles; Joseph Bonanno; T. W. Craddock; John Dove; W. E. Fowler; Herbert J. Harper; Ralph D. Hartman; H. A. Hussey; Louis R. Murray; Robert P. Nute; John T. Roberts; F. H. Rodgers; C. Howard Schotofor; John C. Stiek; E. Von Tilzor Struthers; S. Tomimori; Herbert B. Turner; G. H. Van And; Elliott Hughes Wendell.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.
"Home-Portraits." Closes February 28.
"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)
"Home-Scenes" (Interior). Closes April 30.
"Street-Scenes." Closes May 31.
"Summer-Sports." Closes June 30.
"Summer-Flowers." Closes July 31.
"Shore-Scenes." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Architectural Subjects." Closes October 31.
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.



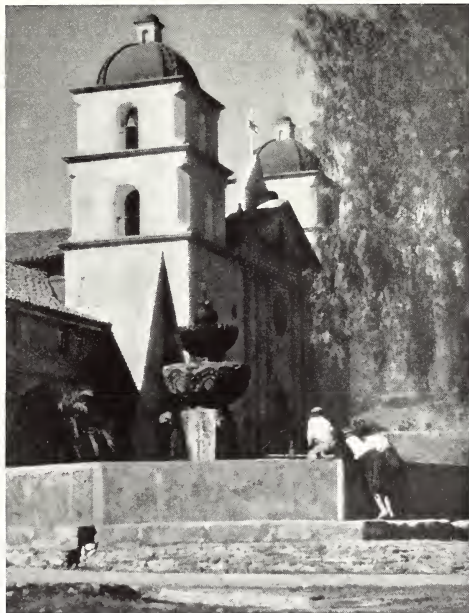
Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Must Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know? Besides, the Editors are too busy with other matters to stop to write to the careless competitor for missing information.

This is often the reason why careless entrants wonder what has become of their prints. Let them be more careful in the future. We will do our part, gladly.



SANTA BARBARA MISSION

E. M. PRATT

FIRST PRIZE—ARCHITECTURAL SUBJECTS

Temperature of Solutions

THERE are many photographic studios, in America as well as in Europe, where the chemical operations are performed in darkrooms which are either not uniformly heated or not heated at all—during the cold weather. Consequently, the operator cannot attain results that are uniform or even satisfactory, the developing-solutions being rarely at the required temperature, and then only when heated by artificial means. In this connection, the *British Journal of Photography* gives some excellent and timely advice:

"With the advent of the colder weather, photographers will do well to take note of the temperature of their solutions, particularly when working early or late in the day. We were reminded of this only recently when we noted that the temperature of some developing solution that had for months past varied between 63° Fahr. and 78° Fahr., was as low as 42° Fahr. Last year, a friend showed us some of his negatives that had been developed in the M.Q. solution exactly as was usually done, in a tank. The plates were obviously fully exposed, but the resulting image was

very weak, and considerable intensification was needed in order to obtain the requisite printing-density. It requires to be remembered that hydroquinone becomes almost inactive at a temperature lower than 40° Fahr., and even if the solution is capable of working, good results cannot be expected if it is allowed to fall below 50° Fahr. Hypo-solution that is cold will not only take longer in action, but it may also fail to do its work thoroughly. On one occasion we had some negatives to intensify after they had the time in the fixing-bath that previous experience had assured us achieved thorough fixation. The partial bleaching and subsequent staining of the negatives in the mercuric iodide bath indicated, when too late, that fixation was incomplete, and this was afterwards traced to the low temperature of the fixing-bath."

"Many workers who find the temperature of the developer or other solution too low for effective work, as pointed out in the previous paragraph, are tempted to modify matters by the addition of a little warm water to the solution. This is a mistake, because the temperature of the solution being controlled by the temperature of the room, such addition of hot or warm



INTERIOR OF CITY-HALL

P. W. G. MOEBUS

water has only a temporary effect, the solution rapidly falling again to the prevailing temperature. This also means diluting the solution below the effective working strength as given in the formulae. The plan of standing bottles of developer, hypo, etc., in vessels of hot water, or in front of a fire, has also only a temporary effect, and one that often allows the solution to fall back to its previous temperature before its action is complete. The best plan is to keep solutions under conditions that do not allow of their falling below an effective working-temperature, and this entails some means of warming the darkroom. It may be pointed out that if the room in which the solutions are kept, and where the work with them, as a general rule, is done is too cold to keep them at a proper temperature, then it is safe to say that it is too cold for the health and comfort of the photographer, and for the production of the best work.

Increased Contrast with Platinum

As is well known, the cold-bath paper supplied by the Platinotype Company does not require negatives of any exceptional density in order to give good bright prints; in fact, the best results which the paper will yield are to be obtained from negatives which, to the

eye of most amateurs, would appear decidedly weak, provided the printing is carried to exactly the right depth. Nevertheless, a writer in *The Amateur Photographer* goes on to say, the tendency of photographers is to get negatives that are too thin rather than too dense; and it may be of interest to note how the paper can be adapted to give more contrast than in the ordinary way.

To prevent any misunderstanding, it should be pointed out that for the best results the negatives should be such as to give prints of the right vigor with no special treatment. Intensification with mercury should not be adopted with negatives that are to be printed in platinum; since, as is well known, a mercurially intensified image gives a distinctly different color to any platinum-prints that are made from it; and, it is said, to the fact that minute traces of mercury are imparted to the paper.

Increased contrast, within certain limits, can be got by the addition of various substances to the normal developer. Of these the most useful are potassium bichromate and ammonium persulphate, both salts which the photographer is likely to have already on his shelves.

The potassium bichromate must be added only in very small quantities, as any excess removes the fine detail in the highest lights altogether, and spoils the



THE CLOSED DOOR

ALEXANDER MURRAY

print. The most convenient method of keeping the bichromate is in a one per cent solution, as this is dilute enough to make it easy with it to measure out the very small quantities of the salt that are required. To each ounce of the developer as applied to this solution, according to the extent of increased contrast to be got; more than the maximum given is not likely to be required as far as printing from negatives containing half-tones is concerned. The prints, when bichromate is used, must be made a little deeper than would otherwise be the case.

As the merest trace of bichromate has an effect, it is better not to develop with this mixture in the same tray as is used for ordinary development: and the developer, after use, should not be kept. The bichromate treatment, it may be remarked, is also very useful when working with stale platinum-paper, enabling good prints to be obtained on paper that has very much deteriorated; although such prints are not quite as pure a black as those got on new paper.

The only other method of increasing the contrast obtainable which need be mentioned is by the use of ammonium persulphate. If the persulphate is kept in a five per cent solution, and the potassium oxalate in a saturated solution, we may make up a developer for increased contrast by taking two drams of the persulphate solution and eight drams of the oxalate, mixing

them and diluting to make three ounces. Twice or three times as much of the persulphate may be used, if necessary; but it is best to proceed tentatively, as any excess of it spoils the color of the print, giving it a rusty brown instead of a good black.

A Rubber-Brush

A PIECE of the porous red rubber, which composes what is known as a "rubber-sponge," makes a very serviceable brush for photographic purposes. It may be cemented to a flat wooden handle by means of rubber-solution or used without. I find it makes a capital tool for applying mountant, for backing plates, for removing backing, and for cleaning out dishes. It never seems to wear out, and is easily kept clean by rinsing out immediately after use.

G. NOBLE, in *The Amateur Photographer*.

Photographs that Talk

"I CAN make you a portrait of your wife that will be a speaking likeness."

"But I get enough of that from the real thing. Couldn't you do it in what they call 'still-life'?"

Exchange.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



AT-HOME PORTRAIT

J. H. FIELD

Advanced Competition—At-Home Portraits Closes February 28, 1921

WE have not conducted an At-Home Portrait Competition in several years; and, for that reason, it seemed advisable to meet the desire of those who were eager to test their photographic strength on a subject of greater technical and artistic difficulty than an indoor-genre. It will be well for the camerist to have clearly in mind the difference between an at-home portrait and an indoor-genre. In a sense, they are alike, in that they are made indoors and, in most cases, at home. Another point of similarity may be noted with regard to the posing of the subject and the composi-

tion. I refer to naturalness, simplicity and—most important of all—truthfulness. There are other less apparent points of similarity; but these need not be described. Excepting the similarities mentioned, the difference grows greater the more thought the camerist gives to the matter. At first glance, he might assume that it were straining a point to find and express so fine a distinction. It is to convince and to help our readers that we are conducting this competition to bring out clearly the difference between an at-home portrait and an indoor-genre. Briefly it may be said that the at-home portrait is a serious—virtually professional—attempt to portray the subject in a simple, truthful manner. It is an attempt to make a studio-

picture in the home by professional means. It matters little whether the worker is an amateur or a professional, the important object is to produce an at-home portrait with all the ear-marks of professional training.

Some of our readers, especially amateurs, may doubt their ability to attempt an at-home portrait. Let me assure them that it is not beyond their photographic skill. The pages of PHOTO-ERA MAGAZINE have been filled with delightful at-home portraits made by amateurs equipped with moderate-priced hand-cameras. In some cases, these amateurs have obtained the temporary use of professional apparatus; but this has been the exception rather than the rule. In the present competition, it would be of distinct advantage for the amateur worker to provide himself with an outfit that would enable him to express his artistic skill to advantage. It should not be a difficult matter for him to obtain a studio-stand for a few days from his dealer at a low rental. If, in addition, he can obtain a view- or studio-camera, so much the better. However, his own hand-camera fitted with a portrait-attachment will enable him to do excellent work.

Whenever possible, the illumination should be daylight. A large north window or door is excellent. In certain cases, artificial light may be used to remove or to soften heavy shadows. Inasmuch as the average amateur worker does not possess an artificial-light equipment, other than the usual electric or gas house-illumination, he will find that the intelligent use of flashpowder, or flash-sheets, is of great assistance. In certain circumstances, he may be able to obtain the loan of a standard flashlamp or arc-lamp from his dealer. Although artificial illumination may be of value as an accessory, it should not be given preference.

The use of screens and reflectors is of great importance. A sheet on the floor in front of the subject—but not included in the picture—will reflect the light upward into the face of the sitter. Also, a sheet placed at an angle to one side of the subject will do much to lighten the face and to reduce the intensity of the shadows. A large white cardboard is very useful to reflect light wherever it may be needed in the picture. Photographers may learn much from the motion-picture director and cameraman with regard to methods of lighting the face in all manner of circumstances—indoors and outdoors.

An at-home portrait must not depart from naturalness, simplicity and truthfulness. In J. H. Field's beautiful child-portrait, those important factors are well exemplified. The reader may ask why this picture is not an indoor-genre. He may point out that it is made in the home and that many indoor-genres of similar subjects have been made. Moreover he may add that it shows the child in an unconventional setting. I admit that the distinction, in many cases, may be difficult to find; but I think that the reader will agree that Mr. Field's charming at-home portrait is a stronger, more beautiful theme and composition than the average indoor-genre. Moreover, it comes under the classification of a *portrait* made in the home. Webster says that a portrait is "a pictorial representation of a person, especially of the face, painted, drawn, engraved, photographed, or the like; a likeness, especially one painted (or photographed) from life."

A genre is usually not made with the intention of making a portrait; and but rarely is a true portrait a good genre. There is always something professional about an at-home portrait that is lacking in the average genre, and it is this very "something professional" that embodies certain qualifications that make a good at-home portrait what it is to the beholder.

We are especially interested to have professional

and semi-professional photographers enter this competition. In a sense, they have an advantage over the average amateur in that they already possess the necessary equipment and experience. Nevertheless, such an amateur as Dr. T. W. Kilmer is an at-home portraitist of no mean skill, and to surpass him, the professional photographer will be compelled to do his very best. The professional at-home portraitist has learned much about human nature. He has learned how to manage men, women and children *in their homes*. In the studio, it is comparatively easy to pose and light the sitter; for he comes to be photographed and expects to be told what to do. In the home, it is often very different. The photographer is invited to make pictures in the environment and position that the *subject himself* considers satisfactory. Often—if it were not for the diplomatic photographer—the results would be ludicrous. Such pictures would become indoor-genres, *not* at-home portraits. The facial expression, background or setting, position or arrangement of the hands and the lighting are to be dealt with; and, upon the skill of the photographer—amateur professional—depends whether the result will have the dignity and beauty of a portrait or the unconventionality of an indoor-genre.

Every effort should be made to use daylight whenever it is possible to do so. However, there are often conditions that preclude the use of daylight and make it necessary to utilise artificial illumination. At present, there are several standard portable portrait-flashlamp and arc-light equipments to be procured and very admirable results may be obtained without the use of daylight. However, artificial illumination is apt to be harsh unless the photographer knows how to soften the power of the light by means of screens, reflectors and the position of the subject. Usually, screens are part of the original flashlamp-equipment, and these are held in position by metal holders which are collapsible and are extended much like a tripod.

In connection with this competition, it is advisable for the contributor to obtain and read carefully at least one elementary book or booklet on at-home portraiture. It is not necessary to purchase such a book, as there are some very helpful brochures that are distributed free of charge by the manufacturers of flashlamps. Several standard works on photography contain chapters that will be very helpful. These books may be found at most libraries. The files of PHOTO-ERA MAGAZINE contain many practical and helpful articles on at-home portraiture. Among these may be mentioned, "Home-Portraiture Using an Ordinary Window," by Felix Raymer, May 1908; "Home-Portraiture," by Fedora E. D. Brown, December 1908; "Indoor-Portraiture in Dull Weather," by J. Peat Miller, April 1910; "Some Notes on Home-Portraiture," by Katherine B. Stanley, April 1911; "Home-Portraiture That Is Different," by Felix Raymer, September 1911; "Home-Portraiture," by David J. Cook, October 1912; "At-Home Portraiture," by Katherine Bingham, January 1913; "Portrait-Photography for Amateurs," by J. G. Allshouse, February 1913; "Indoor-Portraiture," by Katherine Bingham, September 1914 and "Home-Portraits of Little Children," by Katherine Bingham, December 1914. The more the camerist prepares himself intelligently for this competition the better picture he will make and the more likely he will be to win a prize or an Honorable Mention. The Editors, subscribers and readers of PHOTO-ERA MAGAZINE are greatly interested in this competition, for there is much profit and pleasure in store for us all.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
367 Boylston Street, Boston, Mass., U. S. A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper are not suitable for reproduction, and should be accompanied by smooth prints on P.O.P., or developing-paper having the same gradations and detail.

5. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.*

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. *Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.*

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition

Closed October 31, 1920

First Prize: Edgar S. Smith.

Second Prize: George R. Taylor.

Honorable Mention: Charles Harter; F. W. Snyder; Oliver H. Stansfield.

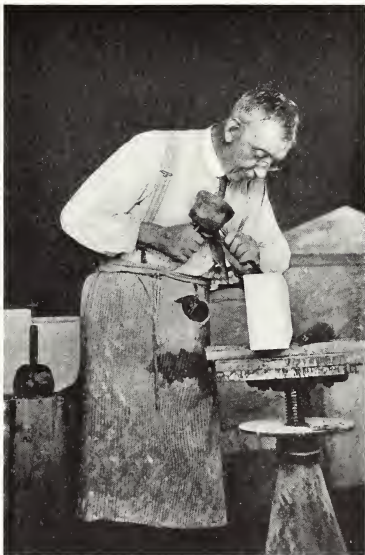
The Beginner and Photographic Bargains

MANY beginners of a few months' practical photographic experience are tempted to add another lens, camera or accessory to their equipment. The temptation becomes especially attractive if the lens or camera desired may be obtained at a reduced price. At the outset, let me say that there are many reliable dealers in new and used photographic material from whom the beginner may purchase a used lens or camera with every confidence. However, there are others—more especially pawnbrokers and auctioneers—from whom the novice can expect very little consideration. In short, if he does not know what he is buying and is too inexperienced to distinguish the genuine from a substitute, my suggestion is for the beginner to use whatever equipment he may have until such time as he can afford to purchase a new lens or camera from an established dealer.

By way of illustration, let me recall one case that came under my personal observation. The beginner in question was a lawyer of undisputed intelligence; but in matters photographic he had much to learn. His first camera was a moderate-priced folding model equipped with a rapid rectilinear lens. A few months of photographic activity convinced him that he ought to have an anastigmat lens to ensure clearer pictures. The anastigmat that he decided upon was listed for eighty-five dollars. One day, while passing a pawnbroker's show-window, he noticed the lens he desired displayed and the price marked upon it was twenty dollars! At the time, eighty-five dollars was more money than he cared to invest in photography, hence this apparent bargain aroused his interest at once. He entered the store and inspected the lens carefully—at least, he *thought* he examined it carefully. To make doubly sure that he was not being misled by the pawnbroker, he telephoned to the American agent of the lens (in New York) and obtained from him a verification of the serial number on the lens-mount. Thus, confident that the lens was genuine, he purchased it and sent his camera and the new lens to the agent to have it fitted to the camera. It did not take long for the agent to discover that the lens was not an anastigmat, although it bore the correct serial number. In short, the original front and back elements of the lens had been removed and ordinary rapid rectilinear cells substituted. His "new" lens was not so good as his own original equipment! In consequence, he was "out" twenty dollars to no avail and he became a "sadder and wiser" man. Many similar cases could be cited to prove my point. There are bargains to be obtained at the pawnbrokers; but it requires an experienced photographer to avoid bitter disappointment.

The beginner should not attempt to purchase used

FIRST PRIZE
BEGINNERS' COMPETITION



THE STONE-CUTTER

EDGAR S. SMITH

developing-tanks, printing-machines, darkroom-lamps and other accessories without *knowing* what he is buying. Sometimes, it happens that a friend is willing to dispose of a part of his outfit at an attractive price. Innocently enough, he may give the beginner a camera that leaks light, a darkroom-lamp that is unsafe, a printing-machine that will short circuit the electric wiring or a shutter that fails to operate accurately. If the beginner has no means to test what he buys and, perhaps, does not know how to make a proper test if he did have the necessary apparatus, my suggestion is to let well enough alone until he can ensure himself against financial loss and disappointment. Obviously, it is no economy to purchase worthless equipment even at a greatly reduced price.

Although I have discouraged the purchase of used photographic equipment by the inexperienced beginner, I do admit that if he enjoys the acquaintance of an advanced amateur or professional photographer he may obtain needed equipment without great risk. That is, if—in the case of the lawyer and the twenty-dollar lens—an experienced camerist had been asked to call with the lawyer at the pawnbroker's to inspect the so-called anastigmat, in all probability, the lawyer would have been saved from his unhappy experience.

Fortunately, there are many reliable dealers whose

business-integrity is security against taking advantage of the inexperienced beginner. Such firms may be trusted to give any one a "square deal," no matter whether the person is known or unknown, experienced or inexperienced. It should not take long for the beginner to find out the name of such a dealer in his city or town. The manufacturers are always glad to refer the inquirer to a dealer who carries used or new goods of their manufacture. There are so many ways for the beginner to protect himself against being swindled, that there is really no excuse for him to suffer loss. The difficulty is to get him to admit his inexperience. It is human for him to wish to stand upon his own photographic feet, and this confidence is to be encouraged. However, when it comes to used equipment, "discretion is the better part of valor."

In this short article, it has been impossible to go into detail; but if my suggestions have served to awaken the beginner to a realization of the difficulties he may bring upon himself through lack of foresight, I have attained my purpose. Hence, whenever the beginner wishes to spread his photographic wings, let him do so only after he has thought well and long of the possible disappointments that may come to him unless he is willing to accept helpful and practical advice.

A. H. B.



EVENING-REFLECTIONS

GEORGE R. TAYLOR

Printing from Wet Negatives

SHOULD a print be wanted quickly after the film has been exposed in the camera it can be made immediately after the negative has been developed and the yellowish color of the emulsion has been removed by the fixing-bath, states a writer in a recent issue of *Kodakery*.

At this stage of the fixing-process the negative may be taken out of the fixing-bath, rinsed in water and placed between clean blotters that are free of lint, so the water that is on both its surfaces will be absorbed. The print can then be made in the usual way, provided a sheet of No. 1 Transparent Kodaloid is placed between the negative and the printing-paper so that the paper cannot come in contact with the negative.

This No. 1 Kodaloid is practically waterproof and is so thin that it will have no appreciable effect on the sharpness of the picture.

After the print has been made the negative should be returned to the fixing-bath and left there for fifteen or twenty minutes and then thoroughly washed and dried.

The reason why the negative must be placed in the fixing-bath the second time is because it was removed from the bath as soon as it was cleared of the yellowish color and no negative is thoroughly fixed as soon as it becomes clear.

There are two stages in the fixing-process. In the first stage the undeveloped silver-bromide is removed.

This makes the negative clear, but during this stage an invisible salt is formed which water cannot remove. Though this salt is insoluble in water it is soluble in hypo and it is during the second stage of fixing that the hypo removes this salt from the film. Negatives should always be left in the fixing-bath for twice the length of time it takes to clear them, for unless the invisible salt is removed it will, in time, ruin the negatives. After a negative has been thoroughly fixed the chemicals remaining in the film can be removed by thorough washing.

The making of prints from wet negatives is recommended only in cases of emergency. Should it be necessary to make several prints from a wet negative the negative must be watched, and should its edges begin to dry before all the prints are made it should be immediately immersed in water and left there for about fifteen minutes, after which the water may again be blotted from its surfaces and the printing resumed.

The Kodaloid can be used repeatedly if it is washed and then wiped dry with a clean soft cloth after the prints have been made.



Some photographers know so many developing formulæ that they can't make a decent negative.

A. SEAMON STER.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Toning- and Fixing-Bath Without Gold

For a toning- and fixing-bath without gold, Dr. F. Formstecher recommends in *Photo-Industrie* the following formula:

SOLUTION I.

Hyposulphite soda...	200 to 250 grams	12 to 16 ozs.
Water.....	1 litre	35 ozs.

SOLUTION II.

Lead nitrate.....	40 grams	600 grains
Water.....	200 ccm.	12 ozs.

For ordinary printing-out paper, mix immediately before using 50 ccm. ($1\frac{3}{4}$ ozs.) of solution II with 500 ccm. ($17\frac{1}{2}$ ozs.) of solution I. Increasing the quantity of lead nitrate will give a bluish tone, whereas reducing it gives a red one.

The freshly prepared bath acts too energetically and is apt to destroy the delicate halftones. Hence it is best to place a few spoiled prints or some scraps of printing-out paper in the bath before using it, so as to supply a certain amount of hyposulphite of silver. The bath must be used the same day it is mixed, consequently no more should be prepared than will probably be wanted. One litre (35 ounces) will tone about 450 pieces 5 x 7 without fear of exhausting the bath. The prints are put into the toning-bath without previous washing. In using a bath with a feeble quantity of lead nitrate, the prints should be exposed longer than in one containing plenty of lead, as the latter do not fix out so much. The quantity of lead nitrate should be so regulated as to tone fully in ten minutes. With shorter toning there will be incomplete fixing, and the print will probably lack durability. When toning is completed, the prints should be washed thoroughly.

It should also be remarked that the toning- and fixing-bath should not be allowed to stand long, as a black deposit forms gradually but does not at once fall to the bottom. This is harmless, so long as it is in suspension; but it will make the bath turbid. As soon as the black particles ball together (in about an hour) they will settle on the prints causing red or yellow spots.

A Self-Prepared Photo-Paper

On page 228 of Prof. Namias's Book of Instructions, H. Malten gives a formula for preparing photographic paper with which he has obtained very fine, vigorous prints. A starch-coating is used composed as follows:

Water.....	50 ccm.	$1\frac{3}{4}$ ozs.
Wheat-starch.....	1 gram	15 grains
Sodium chloride.....	1.5 gram	23 "
Tartaric acid.....	3 grams	45 "

This is boiled till well cooked and, when cold, 5 ccm. (85 minims) of white of egg are added. Dip a glass-rod in concentrated carbonic acid and let it drip into the solution, rinsing off the point of the rod in the solution. This keeps the mixture from becoming musty. More carbonic acid should not be used, otherwise the white of egg will coagulate. The paper is brushed over with this thin-flowing mixture and hung up until completely dry, when the coating is repeated. The paper is then

dried again and immersed in a solution of 12 grams (185 grains) of silver nitrate in 100 ccm. ($3\frac{1}{2}$ ounces) of distilled water for five minutes and again dried. The paper must be over-printed and fixed in a fresh ordinary fixing-bath and finally washed well. This method requires no preliminary preparation of the paper; but, as it is immersed completely in the silver-solution, it uses up a larger quantity.

The Value of Old Negatives

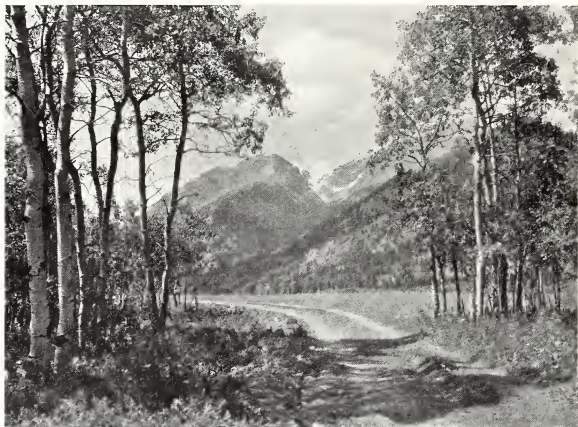
WHEN a photographic business changes hands, the seller usually lays great stress upon the value of the stored negatives, but although these undoubtedly are worth something, it is often unwise to pay much for them—is the opinion of the *British Journal*. It is getting more and more common for relatives to have existing prints copied when the original sitter dies, many people being unaware that negatives are kept for an indefinite period. In the case of celebrities, this does not apply to the same degree; old negatives made at different periods of the sitter's career have some value for press-purposes. The safest way to arrive at the value of negatives is to ascertain how many orders from negatives over three years old have been given during the past two years. In some establishments, it is the custom to clear out the negatives of the most remote year annually, to make room for the new year's work, reserving any which are likely to be of value. Some photographers, when doing this, write to such sitters or their families as they may be in touch with, asking if further prints would be required, and in a certain proportion of cases orders result, a new generation being desirous to see pictures of their parents in their youth.

Needless Risks

DURING a recent vacation we noted the careless way in which many outdoor-workers mistreated their apparatus by unnecessary exposure to light and atmosphere. On one occasion a writer in the *British Journal* remarks, we observed a well-known exhibitor sitting near some sand-dunes with an expensive reflex camera by his side, the lens being exposed to a strong breeze which carried enough sharp sand to make itself disagreeably evident upon the skin when walking. If we consider that the present condition of the Sphinx in Egypt is mainly due to the blown sand of the desert, it is not difficult to imagine the effect of a miniature sand-storm upon a surface which has called for the utmost skill of the optician to polish. On another day we found a less-skilled photographer in trouble with his shutter which occasionally failed to close. In this case the fault was due to rust caused by undue exposure to fine spray while "snapping" breaking waves. Another point generally overlooked is the necessity to protect the lens from strong light when not actually in use, with consequent risk of discoloration. Most hand-cameras are provided with some kind of flap or cap to protect the lens and shutter when not in use, and the little trouble needed to open and close it between exposures should not prevent attention to this important matter.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE. The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

THE first impression is an inquiry: What is the *Why-ness* of the *Thusness*? What message, suggestion or idea is the artist trying to convey?

Why should a young lady be so scantily clad? Why should she be out of doors? Thus clad? Why out in the woods? What is she doing? Part of a woodland pageant? Well, where is the rest of the setting of the scene? What is her *raison d'être*? Her feet and ankles are covered with a sort of a mist—why and whence this mist, and what has it to do with the rest of the picture? Why that ungainly attitude with the right leg? Surely she has not stepped on a tack. Tacks are not indigenous to forest-scenes. And what has become of the poor dear's hands? The right hand is invisible and the left hand is but partly visible. And what is that white mass that leads out of the picture? Why is the picture chopped off at that precise point? Then, again, the girl will bump her head on the top of the picture, if she moves. Captious questions and hypercritical faultfinding? Not at all. Simply to show the incongruity, the inappropriateness of the media used (misused), to convey an idea. And the idea itself is obscure and inconclusive. Bad art!

E. L. C. MORSE.

As a "Wood-Nymph" the photographer was, of course, obliged to pose his subject in the woods. But a much more striking effect could be obtained by placing her before a black curtain rich in folds, especially since the costume is not that of the nymphs. Then the artistic grace of the figure could be greatly heightened by an arrangement of the skirt, so that the left side would start its upward slant at the waistline, corresponding to the downward slant on the other side, and forming thus one straight unbroken line. The position of the "nymph" herself is somewhat strained, the slightly raised foot giving the impression of being too ready to come down. The lower part of the picture is too dim and a little blurred. That part of the white costume back of the figure draws the attention too much to the background, at the same time destroying in part the relief the figure requires.

Y. BILLY RUBIN.



WHAT a beautiful picture this could have been with such a pleasing model! The effort, however, is spoiled by placing the subject in an attitude too constrained to be natural in appearance. The exposure was much too short, making the shadows on the face impenetrable; and want of sufficient light has also rendered the white of the dress *et cetera* harsh and lacking in detail or shadow-relief. The focusing of the feet is faulty, emphasised by the meaningless highlights near them on the ground. The background is open to criticism



THE PICTURE CRITICISED THIS MONTH

as distracting owing to "spottiness." If the figure were turned slightly more to the front, showing the right arm—now missing, with the right fingers—or part of it; and if the left arm were relaxed somewhat, the figure would appear more at ease. A more suitable background should be selected, and the young lady placed to one side of center.

LYNDESE BOURKE.



BACKGROUND nicely chosen and action well carried out in pretty figure. Good detail in drapery, still hair a little too black in print as reproduced. Bottom of picture is too light in tone evidently so altered in printing. In all, a nice little print of a nice little lady.

LOUIS R. MURRAY.



FIRST glance gives two main faults—the background and foreground. The figure is too close to the background, which one can see by the twigs on the dress. No depth of focus in foreground. Maybe the plate was light-struck and caused the foggy appearance. A suitable background would be to pose the figure against a clear sky, or pose with trees in the distance, thus giving the title "Wood-Nymph" its proper meaning, instead of posing against a bush. The figure is

excellent, especially the foot raised. A color-screen would bring out the fine lines in the dress, and show the hands holding the dress which would add more charm to the pose. By reversing the head it would give the hair a proper shade instead of an untidy appearance caused by uneven lighting. The picture made again with a gray or lighter background would make a worthy enlargement. Have the subject raise her head a little to show a dancing pose which "wood-nymphs" are usually supposed to assume.

JOHN JAMES GRIFFITHS.



I ASSUME that the photographer did not trim this print more than was absolutely necessary; also, that the image was carefully focused on the groundglass. However, the print has the appearance of being out of focus and the figure cramped for lack of space. The pose is too rigid. Inclining the body slightly forward and raising the heel from the ground would impart more sprightliness to the "Wood-Nymph." Placing the figure further away from the camera would improve the composition by including more of the "Wood" and at the same time allow the lens to be used at full working-aperture without rendering the background so extremely out of focus.

EMMETT L. MILLER.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



THE initial picture of the current issue, "Curly Head," represents the qualities one desires to see in a portrait—naturalness, grace and beauty of pose. The illumination is so distributed that no part of the figure is in shadow; and yet there is a fair degree of roundness or plasticity. The expression of the fair, young sitter is felicitous, and the placement of the figure within the picture-space is admirable, indeed. It is a picture which any professional should be proud to have produced. Data: Made in the studio of the Washington (D. C.) Capitol Camera Club; 8 x 10 camera fitted with a Voigtlander lens; Seed Gilt Edge plate 30; developed with Nepera Solution; 8 x 10 enlargement from 5 x 7 negative.

The illustrations that accompany H. B. Turner's article (pages 4 to 9) are really records, the prints having been made specially for reproduction, with no attempt at pictorial effect. Mr. Turner's desire was to give the readers a graphic idea, the correct physical aspect, of the scenes presented.

As master of winter-scenes in their loveliest aspect—as they impressed him individually—Mr. W. B. Post presents on page 11 one of his most successful interpretations. The picture was made on Christmas-morning and, therefore, it expresses the Christmas-spirit, although some perhaps, would prefer a material setting. Data: 8 x 10 camera; 16-inch Ross lens; ray-filter; plate developer with pyro-soda; Platino-type print from enlarged negative.

Although photographic silhouettes are not difficult to produce, they are by no means common. Mr. W. Ludlum's achievement in this line, page 13, serves to show the possibilities of original and decorative settings, and should stimulate our friends to engage in this pleasing diversion, during the winter-months. Data: October; indoors; 5 x 7 Premo; 8½-inch R. R. lens; stop, F/64; 1 second; Stanley plate; pyro; contact Cyko print.

Mt. Washington, the highest elevation of the White Mountains, in the New England state of New Hampshire, page 15, is disappointing when compared to mountains of equal height which stand out more prominently. Even Mt. Monadnock, situated in the south-western part of the same state, is not nearly so high as the president of the White Mountains, simply because it is isolated. But photographed, as it has been from a high elevation, and at a considerable distance, Mt. Washington in its winter-dress shows up to better advantage than otherwise. The intervening landscape could have been made more interesting by the camerist, Amos A. Falls, had he not desired to subordinate it in favor of the chief object in his picture. Data: Sept. 26, 11 A.M.; light through heavy clouds; B. & J. three-time color-screen; Ipsco 3¼ x 4¼ camera; 6-inch Ross lens; at F/11; 1/24 second; Cramer Iso. Double-Coated; pyro-soda in tank; print on Buff Cyko.

We do not mind the slight exaggeration of the title attached to the engaging gem, "A Handful of Mischief," page 18, but express our warm approval of the camerist's clever, little stunt; show it to the children and, unitedly, give the tiny prisoner a modicum of sympathy.

Our versatile contributor, William S. Davis, is

busy filling orders for paintings, yet finds time to prepare an occasional article of usually instructive character for our pages. The student in picture-making will find his camera-suggestions—pages 21 to 25—very helpful. The subjects can be easily varied, as well as their position and illumination; but not without disregarding the art-principles involved—harmony, unity and balance—as explained by Mr. Davis, if the student would produce artistically satisfactory results. Data: "Fruits of the Harvest," page 21, November, near noon; diffused light from sky; 4 seconds; stop F/16; 10-inch R. R. lens; Ingento "A" ray-filter; 4 x 5 Cramer Inst. Iso.

"Old Pewter," page 22; November, 3.30 P.M.; cloudy day; light from south-window 3 feet from subject; 90 seconds; stop, F/11; 7½-inch R. R. lens; 4 x 5 Cramer Inst. Iso, backed; camera 4 feet from subject.

"From the Garden," page 23; June afternoon; in studio, clear north-light about 6 feet away; background of light-gray mounting-paper pinned to wall; yellow flowers in glass; 3 minutes; stop, F/11; 7½-inch R. R. lens; Ingento "A" ray-filter; 4 x 5 Cramer Trichromatic plate.

"By the Window," page 24; summer-day; 4 P.M.; good light from west-window, diffused with thin, white cloth; wall in background a dark olive-gray; some diffused light from other windows, which softened the shadows; 2 minutes; stop, F/16; 10-inch R. R. lens; Ingento "A" ray-filter; 4 x 5 Roebuck Double-Coated Ortho plate.

"By the Candle's Glow," page 25; December, 4.30 P.M.; subject placed about half-way between north- and south-windows 20 feet apart, giving diffused lighting; stop, F/11; 7½-inch R. R. lens; 3¼ x 4¼ Cramer Inst. Iso backed; 3 minutes; candle light after this exposure, and second exposure of 10 seconds given to register the flame.

Pleasure-loving Americans, of whom many will journey to the charming and congenial Riviera, on the French shore of the Mediterranean, this winter, will visit ravishing Monte Carlo with its luxurious park and casino. I may place these two attractive objects in the wrong order; but, there is a reason. The architecturally pretentious casino with its semi-tropical setting will attract the fire of the camera carried by the average visitor. Among the several view-points recommended is the one that yielded the comprehensive picture on page 27. The original print, 5 x 10 inches, was a professional photograph lent to us by Mr. J. K. Hodges, who spent a winter in the French Maritime Provinces several years ago. It is chiefly remarkable for its technical excellence which, however, the photo-engraver failed to reproduce with his customary skill.

The Editor owes a debt of gratitude to the little bunnies that pose so obligingly to Katherine Bingham, the versatile professional photographer of St. Johnsbury, Vermont. Their elongated groups have served the dual purpose of delighting our animal-lovers and enabling the Editor to terminate a page, when a printed filler of the necessary size was not available.

Raymond E. Hanson, who together with Herbert B. Turner, has photographed extensively and with

signal success in the region made famous by the Pilgrim Fathers—Massachusetts Bay—is an admirable photo-pictorialist. An example of his artistic skill appears on page 30. This attractive and well-balanced landscape owes much of its charm to the skilful use of the soft-focus lens, producing planes, with good perspective, a full scale of gradations, and retaining the clouds of an appropriate sky without the loss of beauty or relative value. Data: November, 11 A.M.; sunlight; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; $6\frac{1}{2}$ -inch Smith Semi-Achromatic lens; stop, F/6; 8-time ray-filter; 1/10 second; Orthonon plate; pyro; Artura Carbon Black E Smooth.

Advanced Workers' Competition

THE striking and unusually interesting presentation of the Santa Barbara Mission, on page 33, is the artist's valedictory to our competitions. Mr. Pratt has captured three first-prizes in the senior class and, as is *always* the case in the competitions conducted by this magazine, exclusively by reason of merit. After a pause of several years, this genial artist will resume his activity as a competitor. In the meantime, he may contribute, occasionally; for he has made many friends by his beautiful and inspiring work.

In picturing the Santa Barbara Mission, Mr. Pratt has departed from his customary style of soft definition and entered a print in which the drawing and contrast are eminently clear. And yet the means employed do not differ from his wont, except that he used a very small stop, and made the enlargement with the full sharpness of the original negative. Data: August, 3 P.M.; 8-inch Struss lens; used at F/55; K 2 ray-filter; Hammer Ortho; Adorol, in tank; print on Ilford Bromide; developed with pyro.

The view of City-Hall, Alameda, California, page 34, is exceptionally well rendered, the outstanding features being the well-ordered perspective and the admirable illumination. Beginners, in particular, should note that the artist avoided the common practice of placing the door at the end of the corridor or gallery—similar to the present subject—in the middle of the picture, which would tend to produce a symmetrical (martistic) design. He has adopted the principle of treating his subject as he would a stream or a road, *i.e.* obliquely. Data: 2 P.M.; $3\frac{1}{4} \times 4\frac{1}{4}$ Tenax Camera fitted with a Goerz lens; latter used at full opening; 1/25 second; enlarged on Carbon Black.

Although the subject (a person standing at a large door, either knocking or about to unlock it) is not new, our artist, Alexander Murray, a successful contributor in the Advanced Workers' class, has treated it unconventionally. The design gains decorative interest by the inclusion of drooping foliage of a nearby tree, but not enough to obscure the view of the principal object. Here, again, the latter has been wisely placed away from the center of the picture-space—a practice with real artists that is not always appreciated by students in pictorial photography. Data: Entrance to the Germanic Museum, Harvard University; Cambridge, Mass.; October 23, 1920; 4 P.M.; Vest-Pocket Kodak; sunlight; 1/25 second; N. C. Film; Anidol; enlarged on P. M. C. Bromide No. 8. The building was completed in 1915, has never been opened. Hence the subtle meaning expressed by the artist (Mr. Murray) is apparent.

Example of Interpretation

THE at-home portrait by J. H. Field, page 36, used as an example of at-home portraiture, is aglow with

sunshine. The little figure is plastic and the face is finely modeled. The simplicity, naturalness and beauty of this child-portrait has an appeal that possesses a sweetness and charm all its own. Data: April, 1917; 3 P.M.; light from two windows, sun streaming through the smaller one; 8×10 portrait-camera; 14-inch Voigtlander Heliar, used at full opening; $\frac{1}{2}$ second; Seed 30; pyro-soda; print on Iris E Smooth.

Beginners' Competition

EDGAR S. SMITH'S "Stone-Cutter," page 39, would have been a valued addition to our "Indoor-Genres" competition which closed December 31, 1920, had not the photographer decided to enter the print in the junior class, in which it was accorded the first prize. The picture has obvious merits which are limited because of the excessively white objects—the white shirt and the stone that is being operated upon. The subject also gives the impression of knowing that he is being photographed. The element of spontaneity is absent. Moreover, the setting appears a bit cramped, and we might suspect that the whole scene is staged. The artisan has a prosperous look as is the privilege of every American workman; and he is to be congratulated. Judging from the data, the exposure was too short to yield a softer lighting of the whole scene. Nevertheless, Mr. Smith has done very well, indeed, having had less than one year of practical photographic experience and doing all the technical work. Data: Interior of shack; 3 A Kodak; F/7.7 Kodak Anastigmat, $6\frac{3}{4}$ -inch focus; used at full aperture; bright light outside; Ansco Speed-Film; pyro-soda; print on Azo Hard; Eastman M. Q.

The evening-effect with its spectacular sky has been managed with much skill by George R. Taylor in his "Evening-Reflections," page 40. Furthermore, the entire composition evinces the possession of marked artistic ability in the arrangement of the heavy, dark masses to contribute to the effective recital of a powerful story. Much credit is also due to the subordination of the reflections lest they vie with the originals in clearness and brilliance. Hats off to Mr. Taylor! Data: Central Park, New York; April 11, 1920; 6:30 P.M.; sun behind clouds; 3 A Kodak Folding; 6-inch R. R. lens; at stop F/64; Eastman ray-filter No. 5; 1/5 second; developed in Glycin-tank, 30 minutes at 68° F; enlarged glossy print for reproduction.

Our Contributing Critics

OUR excellent assistant critics have performed telling work during the past year. To be sure, the pictures submitted to them have had obvious faults, but no more so than thousands of prints that leave the photo-finishing departments of the corner drug-stores and department-stores; so that the efforts of our co-workers have been beneficial, as the Editor happens to know. For this he extends his hearty thanks and hopes that they will continue their voluntary, helpful and interesting activity which should be shared by many others, if they would be less reticent.

The picture presented in this issue for polite, but serious consideration is by no means perfect in composition; but, despite its appealing pictorial beauty, the author—C. R. Dyer, of Chicago—courts the frank, expert opinion of PHOTO-ERA readers. Data: view in Estes Park, Colorado; August, 10 A.M.; bright light; lens used at F/11; K 2 color-screen; 1/5 second; Standard Ortho; pyro, in tank.



ON THE GROUNDGLASS

WILFRED A. FRENCH



The Erring Camerist

AN incident of pathetic interest occurred at the Photo-Shop of Philadelphia, last month. Mr. Wiegner, the proprietor, and a photo-finisher of national reputation, was discussing with a customer the results of four roll-films he had personally developed for him. Most of these through no fault of his, but through the camerist's own carelessness, had proved utter failures. As Mr. Wiegner took up one unsuccessful negative after another, pointing out dominant faults, the unhappy camerist, amid groans and sighs, would recall the incriminating circumstances. The dialogue, as recorded mentally by Mr. Wiegner, was as follows:

"Here's the first one—a blank."

"Oh, yes; according to my note-book, it was a magnificent view from the summit of the Mohawk Trail. I was so overcome, that I must have forgotten to set the shutter."

"Here's the next one—a double-exposure. How do you account for that?"

"Oh, I remember; just as I had pressed the bulb, a pretty girl asked me the make of my camera and I must have neglected to wind up the film. Too bad! I'll never get such a good chance again."

"Now, in this negative here, everything is blurred."

"That's because I thought I could hold the camera steady with 1/10 of a second exposure. I see, it couldn't be done."

"Well, here we have one that is entirely out of focus. What do you suppose happened?"

"I know, Mr. Wiegner. My notes show that the previous exposure was a group near to, distance ten feet. In the next exposure—a distant view—I forgot to change the focusing-scale to 100 feet. But, oh Lord! I'd give ten dollars if that hadn't happened!"

"Now here, a road with a high rugged wall, running up at the left, is half blank, as if something had been in the way."

"You are right. I remember that the sun was shining in the lens, so I asked a bystander to hold his hat between the sun and the lens. Perhaps, he held it a bit too near and so cut off a part of the view. I must get me one of those lens-shades. Then I'm safe."

"We now come to something different. I notice a couple of children, well posed and clear; but the background is made up entirely of large, black circular spots, technically called, 'Circles of confusion.' They are due to the background being excessively out of focus, causing distortion of the small spaces of light seen between the foliage."

"That's too bad; but how was I to know? I centered my attention on the two kids, thinking that the background would take care of itself. The kids were about ten feet away. I used my F/4.5 lens wide open, and gave 1/100 of a second exposure."

"Well; we'll talk about that later. Here is what appears to be a near view of a water-fall. It is nearly obscured by fog."

"All I know is that everything was favorable—stop, focusing-scale and light; but just before I made the exposure, the wind drove the mist of the falls towards me. I thought nothing of it at the time, and snapped the picture. If only I had waited a minute; for when I closed my camera, it was all clear again."

"We live and learn, Mr. Pond. We benefit by our failures. 'Never again!' as you say. Now this negative of a beautiful lake, with a splendid cloud-effect, is something worthwhile, except that the water-line is anything but level. It runs diagonally across the picture! If you trim the print to make it as level as it should be, it will cut the print down to less than one-half of its entire area, and then it will be of little account."

"I agree with you, Mr. Wiegner. You see, I made the view while standing up in a boat which rocked a little during the exposure. Easily accounted for. I know my lesson now."

"Awfully sorry. Here's another view of the lake, but it's all sky with only a small strip of water showing. No clouds of special interest. Perhaps, you meant to get a view of an airplane which—"

"Well, well! you're a wizard, Mr. Wiegner. That's exactly what I was doing. Don't you see the airplane? Take a magnifying-glass. No? You can't find it? It ought to show up light against the dark sky. Well, I guess I missed it. It was so small, I couldn't see it in the finder."

"Objects like that, and so far away, Mr. Pond, require the use of a telephoto-equipment. Your 4 x 5 folding-camera wouldn't do, at all. Now, the fault in this one here, is quite obvious. You tried to get an automobile going at high speed, about thirty feet away, with an exposure of 1/100 of a second. Impossible, my dear friend. The background is sharp and clear; but the auto! It's nothing but a blurred, elongated streak, about three times the length of the real thing. Isn't it funny? You, yourself, couldn't help laughing. Cheer up, Mr. Pond, here's the last of your failures—well focused, well lighted, exactly as you saw it—probably. A horse and buggy in close perspective, a thing done many times before, although often done in fun. The head of your horse, here, looks about five times normal size, and his hind-quarters about one-fifth as large in proportion. And the man in the buggy! He looks no bigger than a nidget. Cases of exaggerated perspective, like this—a man lying on his back with feet pointing towards the camera, a few feet away; or a person stretching out his hand in the direction of the lens—are quite common, so that you are only one of many innocent offenders."

"I am greatly obliged to you, Mr. Wiegner. You may be sure, I'll not make these mistakes again. They cost me altogether too much time, money and exertion."



Can You Beat It?

OBSERVING a camerist making a near-view of a snapshot of a house surrounded by trees—when a strong wind was blowing—I asked him, among other things, what stop he had just used. To my amazement, he replied, "The smallest one, F/32." "And why the smallest?" I asked. "So that the moving foliage won't show up blurred in the picture," he replied.

I was so moved by this lucid explanation, that I must have presented a "moving" picture.



ANSWERS TO QUERIES



H. E. C.—Prints in natural colors on paper and to be viewed by reflected light, are made by a number of special, patented processes which will soon be placed upon the market. One of the methods is described as follows: In making a negative of a certain subject in colors, a special camera is used. Prints on paper are obtained by triple-printing three rectangulars of color (blue, red and yellow) in correct size of the camera, $3\frac{1}{4} \times 4\frac{1}{4}$ or 4×5 , and are placed side by side on a gelatine surface on each of which a negative color-image is made by application of the original negative. Images are applied successively to a special paper (coated with color-emulsion) in making the final print. The dyes for this process, which were to be imported from Germany, will be made in America provided the necessary backing for the organization of the company can be obtained.

B. C. G.—The use of very fast plates is not to be discouraged except in the case of beginners. Experts can use the fastest plates satisfactorily and obtain all the density and detail that may be required. However, the camerist should remember that the faster the plate the greater must be the precautions taken against fogging in making the exposure and in the development of the plate.

H. K.—To dye Portrait Film so as to make it red sensitive is a matter which should be referred to the Research Department, Eastman Kodak Department, Rochester, New York, for a practical and helpful answer. Inasmuch, as you do not mention the series of Cooke lenses we cannot answer definitely; but we are reasonably sure that the single elements of the Cooke lenses mentioned will not give a larger image and that a portrait attachment should be used for "close-up" pictures. The Intensive plates advertised by R. J. Fitzsimons, 75 Fifth Avenue, New York City, are said to be overexposure proof, even up to twenty minutes exposure. In using Intensive plates, it will be found very convenient to double or treble the estimated exposure. By so doing, sufficient exposure for the shadows will be made certain without any danger of injuring the final result. Although coated with a special emulsion, Intensive plates may be developed with any kind of developer. However, the developer recommended by the manufacturers is best in cases of great under- or overexposure. The Intensive is in no sense a substitute for the Hydranese plate.

R. T. B.—In the Advanced Competition "Copying Works of Art," copies of any style of painting in oils or water-color may be entered provided that the original and the photograph submitted are up to the standard, technically and artistically.

C. J. II.—Green tones on bromide paper are not obtained satisfactorily. The best prints in this color are made by the carbon-process. However, if bromide or gas-light-prints must be used, the usual method is to tone by means of vanadium. The usual formula is: vanadium chloride, 20 grains; ferric chloride, 10 grains; potassium ferricyanide, 20 grains; oxalic acid (saturated solution), $2\frac{1}{2}$ ounces; water to 20 ounces. Dissolve the vanadium-salt in hot hydrochloric acid and a little water. Add the ferric chloride and oxalate to the oxalic acid solution, diluted

with half the water, then add the ferricyanide dissolved in water, stirring well, and finally the vanadium. Tone until the prints turn blue, and then wash them till they are green. Any yellowish stain in the whites can be removed by a weak—2 grains per ounce—solution of ammonium sulphocyanide.

B. F.—To prevent air-bells in Tank-Development boil the water briskly and let it grow cold without agitation. This is the only sure preventive. However, by filling the tank full and then inserting the plates gently and evenly there should be no further trouble. Should air-bells occur it is a sign that the water is highly aerated.

W. W. F.—Firelight effects are usually procured by obtaining a very low source of illumination. For instance, cover up all but a foot or two of a French window or glass-door and place a sheet of white paper on the floor just inside to reflect the light upwards, pose the subject a few feet from it—not including the window or door—and there will be the appearance of firelight. Also, a flashlight or burning magnesium may be used in the fireplace itself. However, care should be taken to screen the lens from the direct light.

B. C.—The minimum size of condensor required in any enlarger is one with a diameter equal to the diagonal of the plate which is to be enlarged.

P. W. J.—To varnish a negative it should be made warm, either in front of the fire or over a gas-stove. Hold the plate by one corner, and pour a liberal amount of varnish in the center, then tilt the plate so that the varnish flows into every corner in succession. Upon reaching the fourth corner the negative should be coated evenly. The surplus varnish is poured back by tilting the negative until it is almost vertical. For a moment or two the plate should be rocked to prevent the varnish from forming horizontal lines. The next step is to heat the plate in front of the fire or over the gas-stove until it is dry, and this should not require more than a minute or two. It should be put aside to cool and it is then ready for printing. The practice of varnishing negatives is now almost obsolete except in cases where the negative is to be used for a large number of prints.

O. W. J.—Stereoscopic photography is not difficult, provided that ordinary intelligence is used in making the exposures and prints or positives. By referring to our advertising pages you will find several reliable dealers and importers who will be pleased to give you complete information with regard to cameras and accessories.

A. D. S.—To make photographic prints in one color (monochrome), it is not necessary to use imported compressed tablets, which are now very expensive, as you state. Most workers prefer the many fascinating processes of converting black and white prints into red, green, sepia, blue or any other desirable color. For this, we recommend heartily a little work, "How To Make Prints In Colors," which is No. 4 of a series of books entitled "Practical Photography." It contains all the known methods of making photographic prints in colors, and will be sent to any address on receipt of 34 cents, postpaid.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication



The Copenhagen Salon

ON November 13, 1920, twenty-five years have elapsed, since "The Society of Copenhagen Amateur Photographers" in Denmark—"København's fotografiske Amatør-Klub"—was founded, and it was desired to celebrate this anniversary by an exhibition which was held during the time from August 25 to September 10, 1920, in which amateurs from the Scandinavian countries, America, England and Holland participated.

America was well represented by the Pictorial Photographers of America, New York, and The Camera Pictorialists, of Los Angeles.

During the past twenty-five years, and from a very small beginning, our club has worked diligently and energetically to try to keep up with the standards which pictorial photography has maintained in the various countries, without, however, succeeding in developing a distinctive Danish school in harmony with the nature and character of the Danish people.

The reason hereof is due partly to the small means that, throughout the years, have been at the disposal of the Club, so that it is only during the last decennary that the members have been enabled to have a common workroom, and also the fact that our amateurs have too eagerly indulged in working with the new, free processes without considering whether they were able to express themselves successfully through these methods.

These and other drawbacks the club has tried to overcome by holding public exhibitions, as through them it will realise better than through any other means—in what respects its members are still behind their able foreign colleagues. However, in the course of recent years, our club has been able to include a number of very skilful workers amongst its members, such as Carl Frederiksen, Sigvart Werner, Wm. Truelsen, Hans Waagoe, Dr. Julius Møller a.o., several of whom, I regret to state, have participated only too sparingly in foreign exhibitions.

The jubilee-exhibition comprised a total of 622 pictures out of which 289 were from America, 106 from England, 67 from Holland, and 160 from Denmark.

The American collection attracted considerable interest, partly on account of the very frequent use of the soft-focus effect, and partly on account of numerous rather new and daring themes, so that the collection really appeared as the embodiment of a new angle of the conception of the pictorial photography. Although the landscapes and portraits exhibited did not, on the whole, vary very much from what was performed by amateur-photographers in other countries, the collection contained some particularly fine genres of great artistic value, which proved that to produce these pictures, the American amateurs have done a far greater work and expended a far greater energy, than we are generally accustomed to see. Many of the pictures also seemed to show that even very great effort had been expended to create them.

As especially attractive, also from an artistic point of view, we must mention: "Rest," Laura Adams Arner; "The Benediction of Night," F. Bauer;

"The Heart of the Storm," Anne Brigman; "The Black Aeolia and the Grey Vase," Margrethe Mather; "Prologue to a Sad Spring," Edw. Weston; "Sisters," James N. Doolittle, all these from California; and "Still-Life," Laura Gilpin, Colorado.

As space does not allow me to mention the names of all the exhibitors and their works, I may add only that Danish amateurs owe much gratitude to their American friends for this collection, and hope that this first public exhibition may lead to a more intimate co-operation in the future.

England sent a very beautiful and representative collection by some of the best and most well-known amateurs, headed by Mr. F. J. Mortimer, F.R.P.S. Works of British amateurs have formerly been exhibited here, and these works are very much appreciated on account of the fair and noble style and composition, and because we feel instinctively a certain degree of sympathy and sentiment with our friends towards the West. These pictures appeal to us by their cheerful, homelike rest and peace. There is less display of energy; but rather a decided fineness of style and performance. The Englishmen have a certain craving for sweetness, which lends a particular charm to their pictures. Among the English contributors we must mention specially—besides F. J. Mortimer—Alexander Keighley, Mrs. G. A. Barton, Charles Borup, E. G. Boon, Herbert Lambert and the Earl of Carnarvon.

The Dutch collection comprised fine contributions, but made the impression that the amateur photography in Holland was still suffering from the reaction of the war.

The Danish collection contained excellent works, and altogether had been sharply criticised, just because it wanted to maintain its position among the works of the able, foreign exhibitors—which it certainly did, although it was suffering from a lack of centralization, the reasons for which have already been stated.

As a whole, the exhibition was a complete success, and also a pleasure to the amateur-club. It was given due recognition by the press, as well as by the public. Our hope is that we may always succeed in persuading our foreign friends to send pictures when we appeal to them, so that we shall be able to create a frequently recurring "Copenhagen Salon."

C. I. BRODERSEN, President of the Club.

A Novel Protector

RAILROAD-PASSES, building- and plant-passes, membership-cards, automobile and drivers' licenses, authorizations of various kinds and many other similar articles, which are generally made of paper and have to be shown frequently, become bent, broken, torn and dirty from handling and carrying about in the pocket. They are generally carried in leather or imitation leather-cases and the face of the pass is shown through a transparent cover.

An ingenious substitute for the more or less cumbersome leather-case is made by cementing the card between two pieces of transparent sheeting. This can best be done by spraying the pieces of sheeting with a solution of one-third wood alcohol and two-thirds

amyl acetate and after allowing them to dry for about ten minutes, to avoid blurring the ink, placing the card between them and uniting them by hydraulic pressure. Satisfactory results can usually be obtained in a somewhat simpler manner by coating the card on both sides with a pyroxylin-solution, using a camel-hair brush, and getting the adhesion to the sheeting by means of a heated hand-roller, using a piece of blotting-paper between the sheeting and the roller.

The face of the pass shows through the sheeting. The card cannot be bent, torn, or soiled, and owing to the toughness of the sheeting, it is very difficult to break it. If it becomes dirty, it is easily washed. Water does not injure it.

Photographs or virtually any flat paper-surface or object can be protected in the same way. They will then stand much of handling, carrying in the pockets and other hard usage.

Death of J. McIntosh, F.R.P.S.

THE death of Mr. J. McIntosh, the secretary of the Royal Photographic Society, on November 15, 1920, caused sincere regret not only in Great Britain, but in other parts of the world. Our personal relations with him, in his capacity of secretary of the R. P. S., have been very cordial, and we shall miss him sadly from our list of correspondents. The obsequies took place November 19, and were attended by members of the Council of the Royal Photographic Society, and other distinguished persons identified with the art and science of photography. His place as secretary has been filled temporarily by R. Tallinson.

Mr. McIntosh was particularly interested in orthochromatic photography, the Autochrome process and photo-technical subjects, in which he acquired expert knowledge. He was also a valued contributor to the English photographic press.

The American Federation of Arts

We believe that there are many of our readers who would be glad to know something of the work done by the American Federation of Arts, Metropolitan Museum of Art, New York City. It sends out traveling-exhibitions that are selected by experts; it circulates illustrated lectures by authoritative writers; it publishes a monthly illustrated magazine, "The American Magazine of Art"; it issues a yearly art-directory, "The American Art Annual"; it conducts a campaign for better war-memorials; it holds annual conventions; it serves as a national art clearing-house; it supplies art-information, study-courses, etc.; it aids in establishing art-commissions; it strives for better art-legislation; it works for better art-education and it fights for American industrial art.

A Matter-of-Fact View

THE reprinted article from the London *Athenaeum* on the London Salon of Photography in December's PHOTO-ERA MAGAZINE has been much enjoyed. Only an Englishman, of a type could have penned such a delightful bit, and few periodicals other than the *Athenaeum* would the article fit so well.

"As it was in the beginning, is now, and ever shall be" seems to be the text of this unimaginative, ultra conservative British critic. New methods, new viewpoints, new endeavor, new conceptions in conveying the beauties of nature, the charm of architectural lines, the play of light and shade and stimulating to appre-

ciation of what is good and beautiful about us, is beyond his horizon. The Victorian age of camera-craft was the high-water mark! He does not possess the ability to see farther. That the lens may be used in place of the brush as the working-medium of an artist is unthinkable. To us, who enjoy the many delicate and exquisite pictorial creations of the British school of modern photography, this critic's viewpoint is deliciously naive, and I, for one, appreciate the humor that prompted the Editors of PHOTO-ERA MAGAZINE in thus bringing it to our attention.

HERBERT B. TURNER.

San Diego Y. M. C. A. Camera Club

ALTHOUGH the San Diego Y. M. C. A. Camera Club, Eighth and C Streets, San Diego, California, is only a year old, it has held two exhibitions that have elicited much favorable comment. The club aims to be of practical service to its members and to promote high standards in photography. The meetings, exhibits and programs for 1921 are comprehensive, practical and of great value to amateur and professional photographers. Visitors are always welcome.

The Montreal A. A. A. Camera Club

AFTER a very successful exhibition held in November, 1920, the Montreal Amateur Athletic Association, 250 Peel Street, Montreal, Canada, has decided to have a Spring Exhibition, April 11 to 16, 1921, inclusive. Entries close March 19. This exhibition is open to amateur photographers wherever resident. Particulars and entry-forms may be obtained from the secretary.

A Plea to Save Our National Parks

WITH the increasing popularity of our National Parks—particularly among camerists and photo-tourists—it is sad to hear that these beautiful pleasure-grounds are about to be marred or spoiled by greedy, unfeeling corporations. For instance, it is proposed to convert the southern end of the Yellowstone National Park into a reservoir for irrigation-purposes in Idaho. This would involve the destruction of one of the most beautiful parts of the park, the death of all the trees and other plants near the shore, and on the islands of Yellowstone Lake by the rise of its water-level and the diversion of the Yellowstone River from Yellowstone Canyon to the south. The city of San Francisco asked and obtained the privilege to dam the waters of the Hetch-Hetchy Valley, Yosemite Pass, thus creating a reservoir to supply the city with drinking-water. What has happened? San Francisco has abused the right granted to it by the Government, and is selling water-power! Similar concessions have been granted to corporations in other national parks, and promised beneficent uses have been substituted by purely commercial enterprises, such as the destruction of beautiful forests and the sale of the timber.

To prevent the disfigurement, and inaccessibility to tourists, of our National Parks—the people's great playgrounds—the Massachusetts Society for Promoting Agriculture, the Appalachian Mountain Club of Boston, and other bodies interested in the preservation, to the American people, of our national parks, have expressed their indignation by protests to their senators and congressmen.

Protests, equally influential and effective, should be registered by camerists throughout this country. This can best be done by the camera-clubs of every great

city in the Union—from New York to San Francisco—but speedily, to be effective. Nearly every camera-club in the United States contains members who have wealth and influence; and as they must realise the sanctity of the nation's great reservoirs of natural beauty that make an eloquent appeal to every pictorialist, to every camerist, to every tourist, who cannot but appreciate the danger with which this valuable pictorial wealth is threatened. I am confident that our camera-clubs will rise to the occasion, and help save to themselves, to the photographic world, at large, and to future generations the inspiring beauty of our National Parks.

Without delay, special meetings should be called to pass resolutions to be forwarded at once to the respective members of the Senate and the House, at Washington. Let the very next item of the camera-club's program yield to the call to protect the beauty of America's National Parks!

The objectors should not rest here, but use their influence, through their Washington representatives, to repeal the Federal Water-Power Act (passed by the 66th Congress) which would make possible the invasion of our National Parks by private interests. Copies of the circular which sets forth the merits and demerits of the Federal Water-Power Act, may be had free of charge by applying to the Appalachian Mountain Club, Tremont Building, Boston, Mass.

W. A. F.

Counting Seconds

CARELESSNESS or indifference causes many photographers to get into bad habits, which practice very frequently results in unsatisfactory work. Although the photographic press has urged the necessity to time pictures correctly and has given suggestions how seconds may be counted with accuracy, there are many photographers who have not mastered the simple process of measuring off seconds without a watch or some other device. Whether it is due to haste, carelessness, or ignorance, many photographers are apt to make their seconds rather short, so that, when a picture requires an exposure of, let us say, five seconds, usually only one-half that time is given, resulting naturally in severe underexposure.

Readers of PHOTO-ERA MAGAZINE, during the last ten years, will recall many serious and humorous suggestions by the Editor how to determine seconds accurately, but without reference to them, the best that we can suggest is to count seconds in the following manner: "One hundred and one, one hundred and two, one hundred and three," etc.—audibly or inaudibly. A little practice by this method, with the aid of a watch, will soon produce accuracy in measuring seconds. There are many photographers who are able to measure half seconds, or even a total of one-half second, with absolute accuracy.

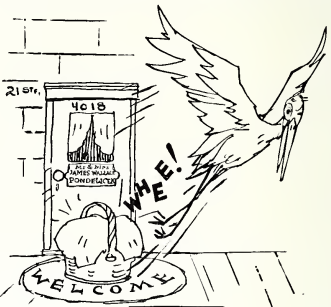
A Misleading Advertisement

A WANT-AD: "Wanted, experienced pianist for moving pictures." Why not a violinist for carrying out the rugs? Or—but you see the possibilities.

Boston Herald.

PHOTO-ERA MAGAZINE was the first to start the agitation—more than a decade ago—against the silly notion of calling motion-pictures, "moving pictures." Maurice Ketten and other cartoonists have ridiculed the moving picture notion very effectively. "Movies," however, has been accepted for significance and brevity.

From
Mr & Mrs. James Wallace Pondelicek



Talk about Happy! our hearts are awirl
What is the reason? a Dear Baby-Girl!

Vivian Claire Pondelicek
Arrived Dec 1st 1920 at 12:49AM
WEIGHT 6 lbs. 1 1/2 oz.

THE STORK'S VISIT

J. W. PONDELICEK

The Birth of a Model Child

THE well-known pictorialist, whose strikingly interesting characterizations made a sensation when they appeared in PHOTO-ERA MAGAZINE, July, 1918, has designed an artistic and expressive card announcing the birth of a baby-girl, December 1, 1920, a copy of which he has sent to the Editors of this magazine, with the compliments of the happy parents. The card is reproduced herewith.



In the Darkroom

We two in the darkroom—I should
Add a third—a wee god—I'm afraid;
Since a something developed that could
Have been caught by no camera made.

We two—and our future was fixed
'Neath the spell of the lamp's ruby rays;
For besides the solutions we mixed
We found one that was not in the trays.

A question—an ages-long pause—
Then an answer, half lost, and I swear
That, what'er the surroundings, there was
Not the hint of a negative there.

Ladies' Home Journal.



LONDON LETTER

CARINE AND WILL CADBY



WE hear on good authority that science has lately been busy with photography, and that the results of recent experiments may not only be surprising but far reaching, necessitating the reconstruction of some of our oldest-established ideas in relation to the action of light as applied to photography.

There has lately been some interest displayed by the public in the Autotype Company's new "Car-bro" printing-process. It is the invention of Mr. H. F. Farmer. A piece of ordinary carbon-tissue is sensitised in the darkroom by immersion in a bichromate working-bath and, while wet, placed in contact with a bromide-print of a landscape marine or other subject. The two are left in contact and exposed to daylight for about fifteen minutes, then separated, and the carbon-tissue squeegeed to a piece of transfer-paper. On this transfer-paper, the picture is developed. The result is a carbon-print from the bromide, the bromide when in contact with the tissue acting as the negative—hence the name. We have lately been examining some of the results at the Autotype Company's rooms, in New Oxford Street, and they are indistinguishable from carbon-prints. The advantage, of course, is that a carbon-picture can be made any size without the necessity of having an enlarged negative, simply by making a bromide print to the desired size. It is claimed by the company that, with the exception of bromoil and oil printing, this new process is the most pictorial on the market; but we can hardly go as far as this, for surely most people prefer a real platinum print with its wonderful depth and beautiful tones to a carbon.

The "London Group" of painters have an exhibition running at the Mansard Gallery, Tottenham Court Road. They are generally considered by the lay press to be very "advanced," which term we believe is intended to suggest something not altogether complimentary. We have just visited this exhibition (the 13th held by this group) and what we wish to emphasise here is the striking affinity between "advanced" and even some cubist painting, and photography. Mr. Adrian P. Allinson—who, of course, is not an extremist—sends some accomplished scenes of mountains, snow and moonlight, and it is most strikingly in this artist's work that the photographic quality is apparent. Viewed from the other end of the gallery, these paintings appear the real thing; that is to say, one has the impression that one is looking at a bit of Switzerland through a far-off window. They are as nearly like photographs as possible, supposing that photography, on as big a scale, could give the coloring of the Alps without showing the cramping precision and "niggle," even when enlarged, of the lens, plus the admirable composition of the artist. Even the most sensational and challenging picture at the show (Mr. Malcolm Drummond's "Common Jury"), a large can-



HIGH-POINT-OF-VIEW TRIPOD CARINE AND WILL CADBY

vas in which the figures are simplified about as far as it is possible to go, viewed from the distance reveals the same photographic truth as shown in Mr. Allinson's work, and this in spite of the fact that this subject is more like a poster, inasmuch as you get its whole story at a first glance, and there is nothing left to discover by closer examination. These pictures are not intended to be viewed through a microscope, or indeed very near up; but they certainly give us to think if, as it seems to us, they show some fundamental affinity with photography, although probably the painters themselves would be the last people to thank us for making the discovery!

A few days ago an aerial photograph appeared in the *Times*, advertising the sale of an estate. It was a view

(Continued on page 53)



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

THE AMERICAN ANNUAL OF PHOTOGRAPHY. 1921. Volume XXXV. Edited by Percy Y. Howe. 296 pages of text. With copious illustrations in black and in sepia tint. Price, paper, \$2; cloth, \$2.50. Postage, according to zone. New York: George Murphy, Inc., 57 East 9th Street, sole sales-agent.

The American Annual of Photography for 1921 was placed on the market early last December, for which promptness the publishers deserve to be complimented. Special praise, however, is due them for a volume that is larger and better than usual. The contents consist of practical, up-to-date contributions by workers of acknowledged ability such as Paul L. Anderson, A. H. Beardsley, Sigismund Blumann, William S. Davis, Geo. D. Jopson, T. W. Kilmer, M.D., Chas. F. Rice, Geo. S. Seymour, and many others.

The pictorial contributors, who appear this year in unwonted force and versatility, are represented by the best that this country has to offer. To such familiar names as Dr. T. J. Ruzicka, Rudolf Eickemeyer, Louis Fleckenstein, Louis A. Goetz, Jared Gardner, Edgar A. Cohen, Lawrence Baker, G. W. Harting, Louis Astrella, Louis J. Steele, E. R. Dickson, J. H. Whitehead, are added comparative newcomers, viz., E. O. Hoppé, Nancy Ford Cones, A. H. Beardsley, Dr. J. B. Pardoe, Phoebe Ann White, W. C. Sawyer, Kate Smith, Belle Johnson, Lawrence C. Randall, J. G. Sarvent, and P. F. Squier—all represented by very superior work.

Numerous helpful tables including a list of active camera-clubs and photo-societies complete a volume which for sheer excellence alone, should find its way quickly to the library of every progressive camerist. Copies may be procured from the publishers, photo-dealers and from PHOTO-ERA MAGAZINE.

A BOOK OF R. L. S.—Works, Travels, Friends, and Commentators. By George E. Brown. 298 pages, 8 illustrations, \$2.50. 1919. New York: Charles Scribner's Sons.

When a busy photographic editor is able to turn his thoughts in the direction of a literary diversion and produces something of permanent value, and also serves as a source of genuine delight to his friends, he performs a service that is not always easy to appraise adequately. Mr. George E. Brown, amidst his arduous duty of editing the weekly publication, the *British Journal of Photography*, has found the time necessary to collate published opinions from various sources, and of genuine literary value, of the works, travels, adventures and diverse activities of Robert Louis Stevenson—that strange, fascinating genius, whose name is familiar to most persons throughout the reading-world, chiefly through "Treasure Island" and "Dr. Jekyll and Mr. Hyde." In the words of the publishers, the book by Mr. Brown is for lovers of Stevenson's genius, telling the story of his books, his friends, and his travels. It shows what Stevenson thought of his own work, provides ultimate glimpses of him in his relations with his literary cotemporaries,

and forms a guide to his own books and to books written about him.

For instance, among these numerous references—arranged by Mr. Brown in a convenient alphabetical order—will be found historical sketches of each of Stevenson's books, which, in themselves, are extremely interesting and instructive to all lovers of Stevenson's works. Personally, we are glad to express our sincere gratitude to the scholarly editor for the service he has rendered to literature, and for the pleasure and entertainment he has provided for photographers who have enjoyed—and are yet to enjoy—the fascinating stories of travel and adventure written by Robert Louis Stevenson.

A Book of Artistic Expression

THE PICTORIAL PHOTOGRAPHERS OF AMERICA announce the publication of the second volume of their annual, under the title of PICTORIAL PHOTOGRAPHY IN AMERICA 1921.

This volume, produced with the co-operation of eminent pictorialists in this country, is representative of the best current work of American pictorial photographers. The editors are Clarence H. White, Henry Hoyt Moore, Dwight A. Davis and John Paul Edwards. The credit for attending to the details of publication belongs to Henry Hoyt Moore, Walter L. Ehrich, Ray Greenleaf, Jerry D. Drew and John A. Tennant. It contains fifty-seven full-page plates, reproduced in the best possible manner by the Walker Engraving Company of New York, and printed superbly on art-mat paper by Norman T. A. Munder Company, of Baltimore, which firm was honored recently by the American Institute of Graphic Arts.

The text-pages offer material of great interest, and include "Painting with Light," by Professor Arthur Westley Dow, of Columbia University; an interview with Clarence H. White on "The Year's Progress of the Photographic World," and interesting descriptive data by the contributing photographers. The book is a worthy example of American graphic arts in its make-up, engraving and typography, is about 8 x 11 inches in size and bound in heavy boards.

The pictorial subjects are varied in character, and excel in thematic novelty, beauty of composition and sanity of style. They may be truthfully regarded as an epitome of artistic expression of pictorial photography in America. The publication of this volume is undertaken as a contribution to the cause of Pictorial Photography in America, without any possibility of profit arising from its publication. The edition is limited, and those who desire copies should place an order *without delay*. Price, \$3.00, safely packed and postpaid. Immediate delivery is assured.

Orders should be sent to PHOTO-ERA MAGAZINE, 367 Boylston Street, Boston, Mass.

Back Volumes of Photo-Era Magazine

THE call for back volumes of PHOTO-ERA MAGAZINE has never been so great as at present. The educational as well as the entertaining features of the magazine are apparent to camerists who desire to improve their photographic work technically and artistically. We have the following complete volumes in stock, ready for binding—1901, 1907, 1908, 1909, 1910, 1912, 1913, 1914, 1915, 1916, and 1917. The price is 15 or 20 cents per copy according to the year—1904 to March 1917, 15 cents; March 1917 to July 1920, 20 cents. Postage 3 cents additional per copy. This is an excellent opportunity to obtain a complete file of PHOTO-ERA MAGAZINE at the old price. Orders will be filled as received and subject to prior sale.



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent Office during the month of November, the last issues of which have been disclosed to the public.

Patent, number 1,355,146a, Photographic Plateholder, has been issued to Raymond F. Iseman and Eugene L. Snyder, of Canton, O.

Stanley Graham of Los Angeles, Cal., has invented a Camera-Shutter Exposure-Lock. Patent, number 1,355,328.

Patent, number 1,356,236, is of interest to photographers. It is a Process of Reducing the Sensitiveness of Silver-Compounds and Products. It was issued to Nathan Sulzberger of New York.

An Indicator for Cameras patent, number 1,356,583, has been granted to Edward M. Woodworth of Rochester, N.Y.

The Eastman Kodak Company has had assigned to it patent, number 1,356,595, invented by John Bordin, on a Folding-Camera.

Alfred P. Hantsch, New Brunswick, N.J., has received patent, number 1,357,164, on a Magazine Plateholder.

Camera, patent, number 1,357,363, has been issued to Louis Teitzel of Junction City, Kan.

Patent, number 1,358,090, has been issued to Ralph C. Matson, Portland, Ore., on a Photographic Plateholder.

Henry T. d'Albert of Arlington, Va., has received two patents relating to cameras. Patent, number 1,358,622, is on a Print-Conveying Conduit for Cameras. Patent, number 1,358,623, is on a Photographic Exposure-Apparatus and Conveying-Conduit therefor. Both patents have been assigned to Grant Leet, Washington, D.C.

An Autographic Film-Cartridge and Method of Using Same has been issued to John P. Scannell, Chicago, Ill., and assignee Chicago Title and Trust Company. Patent, number 1,358,990.

Henry J. Gaisman of New York has received patent, number 1,359,245, on a Photographic Apparatus. The patent has been assigned to Eastman Kodak Company. Another patent just issued to Henry J. Gaisman is numbered 1,359,246, on an Apparatus for Producing Designations on Photographic Material.

Patent, number 1,359,382, Photographic Film-Developing Device, has been issued to John Huffnagle, Germantown, Pa.

Florence M. Warner of New York has a new Art of Color Photography. Patent, number 1,358,802.

Pretty and Witty

"Let me snapshot you, please," said Pete,
 "You look just sweet enough to eat."
 "And is that why," asked pretty Kate,
 "You wish to get me on a plate?"

Exchange.

London Letter

(Continued from page 51)

of a part of the property, and there is no doubt that the position from which the photograph was made, high enough in the air to give a comprehensive and complete bird's-eye view of the house and its surroundings, gives a far better suggestion of the place than several photographs made from the ground. If this is so, there must be a future for aerial photography for many purposes, as we suggested in a former letter. This is the first occasion on which an aerial photograph has been applied to this purpose commercially in this country, and another singular point about it is that it quite suggests a modern cubist-painting of the not too extreme variety, incidentally strengthening our contention of the affinity between pure photography and this latest development of painting. We enclose a reproduction of the photograph for the Editors' verification and information.

Writing of aerial photographs reminds us that lately we had occasion to make some negatives from a high position. We were staying in a fruit-growing part of the country. We noticed a local contrivance made specially for picking the fruit from the high but slender branches without the use of an ordinary ladder, and promptly annexed it for our purpose. So well did it work, that we have had one made specially for our own use about the place, when a high position for the camera is an advantage, which is so often the case. We enclose a photograph which will tell the reader more about the construction of the apparatus, at a glance, than we could get into a paragraph.

Last week, we visited the Camera Club, where Mr. C. P. Crowthor, F.R.P.S., is showing thirty-four examples of his work. They are all for sale and the gross proceeds are going to that worthy cause, the St. Dunstan's Home for Blind Soldiers. Mr. Crowthor's subjects are mostly Japanese, and we admired particularly the way he treated the temples. These are tempting subjects for the photographer, and we remembered with shame some of our own youthful and immature attempts at their splendors. There is about all Mr. Crowthor's work a quietness and restfulness for which, at the moment, we were very grateful, for we had come in to the Camera Club after a nerve-racking experience from the Little Theatre, next door. We are not aware whether the fame of London's Grand Guignol has penetrated to the States. It is here enjoying all the strange success of its prototype in Paris. Londoners do not seem in any way behind the Parisians in being attracted to that kind of realism in dramatic art that spares the spectators no kind of horror. That the acting is so exceptionally good, only increased the thrills that crept down our shuddering spines.

After being spectators of a scientific operation that galvanized a corpse into action—and murder-action at that—and having watched the chipping away of plaster-of-Paris which discovered another corpse, the reader may guess that our nerves were somewhat jangled, and that the quiet realism and restfulness of Mr. Crowthor's show was just what we needed. So, anyhow, there is something very sane and reassuring about photography, and we felt that it had saved one of us from hysteria.



WITH THE TRADE



Forty-Three Years of Success

WE take pleasure to call attention to the well-known firm of Willis and Clements, 1814 Chestnut Street, Philadelphia, the American agents for the sale and distribution of Platinotype, Palladio, Satista, Self-toning and other photographic papers. Mr. Willis is the inventor of Platinotype paper. The firm was established in 1877, and for forty-three years it has maintained a high reputation for progressiveness and business integrity.

Annual Entertainment and Dance of Willoughby Co-Workers

THE spirit and co-operative effort that made possible the organization of the Willoughby Co-workers were in evidence at the yearly entertainment held recently at the Waldorf Astoria, New York City. About six hundred guests were present, and a very fine program was given by the Social and Welfare Club of the Willoughby Co-workers. Dancing followed the entertainment of the evening. Mr. Charles G. Willoughby took the opportunity to express his appreciation of the splendid efforts that this organization had made to promote the business and high reputation of Chas. C. Willoughby, Inc., 110 West 32d Street, New York.

Our Admirable Photographic Industry

DESPITE the recent depression in business-circles and industrial activities, and pessimistic attitude of a large number of people, it is with much satisfaction that PHOTO-ERA MAGAZINE expresses a sentiment that is the very opposite.

There is, perhaps, no industry in the United States that has enjoyed, and still enjoys, a high degree of prosperity, and where there has been no occasion to complain along the line of other activities. There has been no lack of native production, nor, we may say, of foreign manufactures. Our markets have been filled with both. As for ourselves, we have had our full share of the very best class of photographic advertising. Furthermore, we have enjoyed to the full extent the confidence of our advertisers. They have met their obligations towards us with satisfactory promptness. We have closed our books for the year 1920 with scarcely any bad accounts.

PHOTO-ERA MAGAZINE wishes to record the exemplary business dealings that we have had with the photographic trade, in general. That we have been spared the annoyance of questionable advertising, is due simply to the policy that we have adopted and maintained since 1907, when the magazine left the hands of its original owners. The photographic manufacturers and dealers of this country, as a class, may well point with pride to their admirable products which they have handled and to their exemplary business-methods. We wish that this might be stated of many other industries.

There is no doubt that the American photographic trade will enjoy another year of success and prosperity, to which it will be fully entitled by the factors which have contributed to their success in the past.

Bargains—in General

Now is the time when many people are looking for bargains in cameras and lenses. Our advertising-pages will supply that need. There are bargains, too, in other commodities including stocks. The thrifty man with foresight may be looking for an honest, reliable broker—one who has bargains that the buyer need never worry about. He has but to turn to our advertising-pages.

Inefficient Photo-Finishing

It is well known that the photographic trade is embarrassed, to a certain extent, with incompetent and unreliable dealers, and also with photo-finishers of a class that ought to be relegated to the jungles of Africa. Very frequently, we receive tales of woe from camerists whose films or prints have been ruined by bungling photo-finishers. In the opinion of a well-known traveling photo-salesman, over fifty per cent of the photo-finishers throughout this country were ruining good work every day, and their general output was atrocious.

It is for this reason that PHOTO-ERA MAGAZINE takes pleasure in publishing the advertisements of a number of thoroughly reliable photo-finishers, who are perhaps charging a little more than others, but are competent to produce work entirely satisfactory to their customers. More than this; they are prepared to produce contact-prints and enlargements of the highest degree of excellence, even though they may not always be appreciated by a certain class of customers.

Readers of PHOTO-ERA MAGAZINE, who may not be equipped to make photographic enlargements, or prints on special paper, are reminded that this work can be done very skilfully by any of the photo-finishers who advertise in this publication.



The Intensification of Autochromes

It is a great essential sometimes not grasped by workers using the Autochrome process, until too late, that the second development of the plate must be complete, otherwise the brilliancy of the colors obtained by intensification may be lost when the plate is fixed. It sometimes happens that the picture is not developed fully in the second developing-bath, even after it has been left some minutes, by reason of the fact that the agent has lost much of its power, and is not capable of carrying the operation sufficiently far in order to prevent reduction when the plate is put into the hypo-bath; or the solution may even be too cold to do its work perfectly. My own plan, when I find that an Autochrome needs intensification, is to give the plate a couple of minutes in an entirely fresh solution before carrying on with the process; in this way any fear of the trouble is avoided. Unfortunately, after the hypo-bath has done its work, there is no satisfactory means of restoring the transparency, and prevention is always the wiser course.

R. M. F., in *The British Journal*.

Wollensak World

PUBLISHED BY THE
WOLLENSAK OPTICAL COMPANY
ROCHESTER, NEW YORK



DEVOTED TO
LENS AND SHUTTER
INFORMATION

Vol. I

JANUARY, 1921

No. 1

SPECIALIZATION BRINGS QUALITY

**Wollensak Optical Co. are
Specialists on Lenses
and Shutters**

This is the age of the specialist. American industry has long since discovered that concentration of effort achieves the best results. Specialization brings success and fosters quality.

Specialization has helped the Wollensak Optical Company develop a line of photographic lenses and shutters of scientific and optical precision, a line that includes lenses for every purpose, a dozen types in focal lengths from 2" to 26".

It is well to insure satisfaction by having your lens and shutter needs supplied by a specialist.

COUNTERFEITERS EMPLOYED PHOTOGRAPHIC METHODS

**Velostigmat Lens and Other Well Known
Photo Materials Used by Swindlers**

WASHINGTON—Secret Service men recently rounded up a notorious gang of coiners, who had succeeded in flooding the East with spurious bank-notes. The counterfeit money was so cleverly made that it fooled even experienced bankers.

It is unfortunate that such a good lens as the Series I Velostigmat F:6.3 should have been used for such a corrupt purpose. It is, however, a striking testimonial to the sparkling definition of the Velostigmat, that the criminals succeeded in evading justice as long as they did.

VERITO SCORES AGAIN

In the December issue of *American Photography*, three out of four prize-winners used the Verito. This is not an unusual occurrence. It is typical. At a recent National Convention, the Verito captured seven out of fourteen Salon honors—as many as all other lenses combined. The Verito Soft-Focus Lens is consistently a "winner" where artistic quality is a consideration.

We don't recommend the Velostigmat for the uses mentioned above. But we do recommend it wherever sharp, crisp definition is desired.

Every Velostigmat is an anastigmat—*plus*. The Series I, F:6.3, is a triple-convertible for the commercial man; Series II, F:4.5, high-speed for Graflex or Studio; Series III, F:9.5, a fast wide-angle lens; Series IV, F:6.3, a popular-priced fast anastigmat for hand cameras.

Our catalog tells you more about them. Fill out the coupon at the bottom of the page and we will send a copy. No obligation, of course.

WOLLENSAK-ROCHESTER

Gentlemen—Please send me catalog

☐

For Amateurs

☐

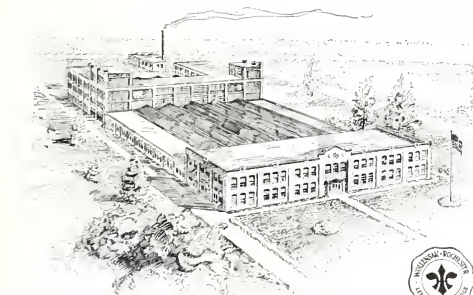
For Professionals

Name.....

Address.....

Please Print

PE



This is the plant of the Wollensak Optical Company—the largest in the world devoted exclusively to the manufacture of photographic lenses and shutters. It has 80,000 sq. ft. floor space and ample accommodations for outdoor athletic activities of employees.



When Ordering Goods Remember the PHOTO-ERA Guaranty

Why Not Make It a Party?

Those vacation-snapshots, the baby's first steps, your football team in action—instead of passing around small prints for your friends to see, call them all together and show and explain your pictures enlarged, on your home-screen.

Combination models of the

BAUSCH & LOMB BALOPTICON

project pictures direct from your prints. No special slides necessary. This Balopticon projects opaque objects such as prints, illustrations, postcards, maps, specimens, etc. And the new gas-filled Mazda ensures you against light-trouble. But, for this, be sure to get a Bausch & Lomb Balopticon.

BAUSCH & LOMB OPTICAL CO.

558 ST. PAUL STREET, ROCHESTER, N. Y.

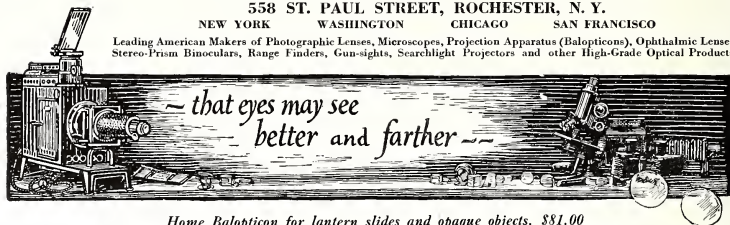
NEW YORK

WASHINGTON

CHICAGO

SAN FRANCISCO

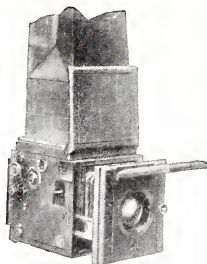
Leading American Makers of Photographic Lenses, Microscopes, Projection Apparatus (Balopticons), Ophthalmic Lenses, Stereo-Prism Binoculars, Range Finders, Gun-sights, Searchlight Projectors and other High-Grade Optical Products.



*~ that eyes may see
better and farther ~*

Home Balopticon for lantern slides and opaque objects, \$81.00

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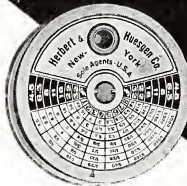
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POPULAR PRESSMAN BUTCHER REFLEX

This compact and light weight 3½ x 4½ Reflex Camera is made with reversible back and long focus. The fixed shutter and self-setting mirror ensure perfect exposures. Camera extremely well made and neatly finished with pin-grain leather. Equipped with the famous Cooke F/4.5 Anastigmat lens. This is an ideal outfit, for amateur and professional. We are offering **\$95.00** for this camera at a special price of

ABE COHEN'S EXCHANGE

113 Park Row, NEW YORK CITY



**HEYDE'S
ACTINO
PHOTO-
METER**

***Eliminates Guessing
in Photography!!***

The simplest, most effective and most accurate instrument for determining correct time for exposure. Easily and quickly manipulated; compact and always ready for use.

No Sensitive Paper Used For Tinting

Exposure table complete on dial.

Essential to the Photographer who wants perfect pictures.

Order by mail or from your dealer. Write for descriptive booklet.

**HERBERT
& HUESGEN
CO.**

18 East 42nd Street
NEAR 5TH AVE., NEW YORK.

New Vest Pocket Model

Size Dia. 2-3/8" x 13/16" Thick

Price \$10.

*Dealers: A postal
will bring our
special offer*



Bausch & Lomb Tessar Lenses



for Immediate Delivery

THESE world-famous anastigmats are ready for prompt delivery in both small and large sizes, for amateur or professional use. Production-conditions in this important department of our business have been restored to a normal basis for several months past, and no further difficulty is anticipated in meeting the constantly growing demand for TESSARS.

This is welcome news to you who seek the best possible lens-equipment for your camera. You can obtain such equipment without delay or speculation by going to your dealer and ordering the particular Tessar which best meets your requirements:

A TESSAR IIb (F/6.3) for your hand-camera, unusually compact, yet admitting 61% more light than the ordinary lens; or

A TESSAR Ic (F/4.5) for your reflecting-outfit—three times as fast as the ordinary lens and especially designed for speed-work or portraiture.

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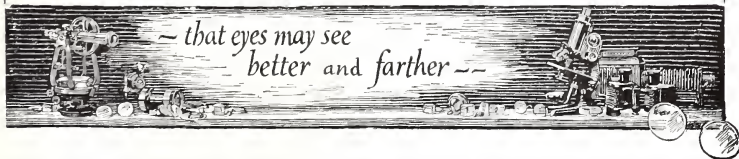
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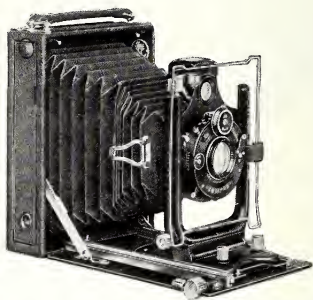
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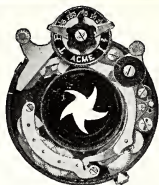
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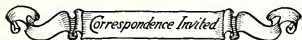
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PHOTO-ERA MAGAZINE

The American Journal of Photography

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Vol. XLVI

FEBRUARY, 1921

No. 2

Systematic Specialising in Photography

GERTRUDE NIERLING



GENERALLY speaking, amateur-photographers are of two classes—those whom the camera serves its main purpose as a recorder of events, and those who use photography as a means of artistic expression. It is of the latter class that I am writing.

Much has been said about the advantages of some training in an art-school as an aid to pictorial photography. There is much to say in its favor; but most of us cannot have all things. The serious amateur—if he must rely mainly upon himself for schooling—will be wise if he lays out for himself a systematic course of pictorial study—that is, pictorial, not technical experiment with a definite and high artistic standard. This will supplement that gamut of technical experimentation which we all run—and that, usually at random. In a small way, at least, the photographic amateur must develop the artistic versatility and the artistic command which the old-fashioned academy of art demands of the painter—that systematic and thorough practice by which he learns to detect the greatest pictorial possibilities in a given subject or object, by which he develops artistic judgment, and the skill with which to get exactly the effect he wants. Of course, retouching and other technical devices play their necessary parts—and when I speak of retouching, I mean not the slight “touching-out” so much as the decided “touching-in” of strong lights and striking shadows. The tendency, to-day, is to *rely* too much on these things; to throw the whole burden of the effect upon them, as the popular song-writer does who relies on an ingenious vaudeville-singer to “put across” his song. That reliance upon ingenuity is a typically American trait—a good one, perhaps, and highly interesting—but less good and decidedly risky when applied too frequently to things artistic. The actor rehearses a romantic rôle

under prosaic circumstances, knowing the impetus that lights, costume, and scenery will give finally; but he never *relies* on them for his effect. The violinist recognises an effective accompaniment; but he does not practice with an eye to that. The amateur-photographer, although he may recognise the making of a rare effect—with the aid of a printing-device or two—must be able to discover what is good in itself, thereby becoming artistically independent of after-improvements—with the natural and understood reservation that there is rarely a picture that is not the better for use of them.

The study of composition is the study of the line of action—as a visual fact and a psychological effect—and *composition is more emotional than intellectual*. Composition, like selection, should be decided by instinct, and then tempered by judgment—not vice versa—else spontaneity will be lacking, and without that there is no real art. It is well for the ambitious student of pictorial photography to study text-books on art and great paintings. Then, with some thought and much imagination, he should go about making for himself a collection of original studies, beginning with a systematic program of themes to be covered, and giving a certain length of time to exclusive—or nearly exclusive—specialisation. All this depends on the amount of time and the quantity of films or plates that he can afford to use on subject-matter other than his hobby—for there must be no favoritism of theme. Let us suppose that he sets out to make six, ten or twelve really interesting studies as proof of his mastery of each problem. Skill consists not merely in doing a thing well—it is the ability to do the thing in the way that it was meant to be done.

Figure-studies can be divided into three general classes—portraits, character- and genre-studies, and decorative studies—or into four, if one cares to make the distinction between the genre-



"WHEN THE HEART IS YOUNG"

J. HERBERT SAUNDERS

and the character-study. This will likely be done by the student whose special interest is in figures. One class may overlap another, and one picture may fall into two, or possibly three-classes—witness some of Baron A. de Meyer's—but the skill of the photographer depends upon whether or not his picture falls most naturally into the class for which it was intended. By chance, a picture intended for a character- or genre-study may fail as such; but it may make an excellent portrait. Again, a figure planned for decoration may turn out to be too hopelessly domestic for that, but still it may be a good example of another style. However, a decorative study is more apt to be a decided success or a failure; for sometimes, another type loses itself—usually by too strong light or shadow—to find itself again an extremely interesting decoration, which proves that a

good picture does not always signify a skilful photographer; for the test of skill is not a good effect, but the desired effect.

Lighting, light and shadow are all-important factors in photography, even as in painting. Contrast the psychological effect of a simple twilight by Corot with that of representations of gods on Greek vases or with the poster-treatment of any subject, no matter how awesome of itself. No, shadows are not for the poster; but they are the soul of photography. We see and hear art only to feel it, and the finer photography has proved that it is not color, itself, so much as light which arouses one feeling or another. That fact makes light a nearly limitless source of study in photography—for this reason and for the technical one, owing to the difficulty of photographing light as it really appears in nature. This difficulty is due partly

to the effects of different colors transmitted by the lens, and also to the fact that since the birth of the race, Man has *felt* light when he *thought* he *saw* it. This is not advanced philosophy, but simply this,—for an extreme example—one may experience a genuine London fog, and at another time, after a day spent in reading Dickens, one may go out into a foggy mist and it affects one's imagination in the selfsame way—according to the temperament of the individual. So it often happens that the amateur who is very sensitive to an artistic or spiritual impression of nature, will be the one to require the most analytical study and practice before he can register subject-material satisfactorily with the camera.

Lights and shadows serve in all photography; but lighting, beyond the question of necessity, is of supreme spiritual value in landscapes. In a practical routine, one should study many things separately—the sky and clouds; dunes and moorlands; meadows; mountains; distances; the sea, rivers, and all water; trees, both for distant impression and singly, for taken individually, nothing has more personality or greater emotional appeal than a tree; snow, wind, rain, and fog; all the lights of the sun, dawn and twilight; and the natural and artificial lighting of night. I mention all these separately for in pictorial study, which is based on emotion, all the phases of Nature are distinct. Then, there are the seasons; each season makes a distinct impression and appeal which it is not so easy to register convincingly. Consider the number of pictures which, on first sight,—except where there is snow on the ground—give rather an unexpected impression. There seems to be a human tendency to view a landscape subjectively—possibly because it has a relation to past experiences in our lives—and unless the photographer's impression is altogether convincing, it is likely to lose its effect. Nature is never negative and rarely flexible—without the influence of decided imagination, which is another matter.

Each season has its quality and one or two telling characteristics. There is winter in Russia and winter in New York City; summer in Louisiana and in Rome; there is autumn up the

Hudson and in the Bois de Boulogne, the spring of Holland and that of New England, and among these there is a distinction without a difference; but that is the least of the amateur's woe, for if the *one positive quality* of the times is caught, the rest of the impression will take care of itself. Landscape is the poet's theme in photography—and his despair. I have made a special study of *composition in relation to seasonal effects*, and that—with some special study of retouching—effects which particularly support the characteristic light of each part of the year—is of the greatest value in making the time of year apparent.

There are the branches of architecture, sports and speed-themes, of which much could be said were there space. The group-picture and the arrangement of interesting and expressive "still-life" studies are both worthy subjects for study. Child-studies are an endless source of delight and disappointment. Animals, as a matter of love for some and of routine for others, should be used for a study-series. And to those who do not especially love animals, or birds, be it known that Man is the only "funny" thing in the world. Other things are funny only as they remind us of or repeat some trait or foible of Man; but find, if you will, that trait or pose in an animal or barnyard-fowl by which it resembles the human animal and you will have found the source of the keenest caricature. In PHOTO-ERA MAGAZINE for October, 1920, is a picture by E. D. Leppert. It shows a rooster with his four white hens and embodies all the painful pride of the old-time family-group. The impression is not forced; but it is there to be seen, and therein lies its wit.

Of course, the themes for specialisation are innumerable; but the keen amateur will think of them, and the serious one will specialise in as many phases of the art as the price of materials and his available time will permit, before he reverts to his favorite branch of photographic work. However, when he does go back to his own "pet" theme, it will be with quickened artistic judgment and an improved style which could never have been acquired without this sort of serious, thoughtful and *practical* insight into the other lines of pictorial art—this systematic specialising for spiritual skill and versatility.





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The Camera in Algeria and Tunisia

In Two Parts

HERBERT B. TURNER

IT has been suggested that I add to the series of travel-articles already printed in PHOTO-ERA MAGAZINE one on Algeria and Tunisia and their pictorial value to the photographer. I must confess, at the beginning, that I have not been to either since the year nineteen fourteen; but I made the city of Algiers my headquarters during the greater part of the winter of nineteen thirteen and fourteen, and from this point of vantage made trips into the Sahara Desert, and through a part of Algeria and Tunisia.

In the good old days before the war—when the world was sane—one might sail from Boston or New York, on one of the very comfortable liners that made Europe by the Mediterranean route; and, after a glimpse of either Madeira or the Azores, have a few hours on shore at Gibraltar before disembarking at Algiers. Better still, a first-class ticket could be bought for

eighty to one hundred dollars in those days, that allowed for stop-overs at the ports of call along the route and, at last, landed the traveler at Genoa. With such a ticket one could stop over a steamer at let us say Madeira, spend a month or two in Spain—as I did—the winter in Algeria, the early spring in and about Naples and Rome and then reach Northern Italy via Genoa before the expiration of the ticket which was six months from the time of embarkation in America. As the actual sailing-time between America and Genoa is usually twelve or more days, the rate for meals and stateroom, which, of course, is included in the ticket, was extremely reasonable. To-day, the trip can be made in the same way, but, alas; the passage is not the same by many a dollar.

The living-conditions for the visitor in Algiers are all that can be desired. Hotels and boarding-houses are numerous that offer clean, comfortable rooms and three excellent meals a day

for from one dollar and eighty cents a day to four or five dollars a day pre-war rate, according to the degree of luxury and the grandeur of the establishment. Even to-day, when the rates, I am told, are four times those of nineteen fourteen in French money, the rate of the present exchange is such that, figured in dollars, the difference is not alarming.

We, for it was with my wife and children that

that went with them stand out in my mind to-day for their excellence. The rate I paid was one dollar and eighty cents a day for each of us, meals included.

The climate of Algeria and Tunisia from November to the middle of April is much like that of California, the days are mild so that overcoats may be discarded and the nights are cool enough for a grate-fire.



ARABIAN CORNER, ALGIERS

HERBERT B. TURNER

I traveled, after a week at one of the large hotels at Mustapha-Superieur—the European residential section of Algiers situated on the hills above the main city—found in that quarter of town an ideal little hotel, Arab in architecture, Swiss in management, placed in extensive grounds of its own which a landscape-gardener had laid out with the semi-tropical shrubs and trees at his disposal. The rooms were large and comfortably furnished; and, from the windows one looked out upon an extended view, the gardens and villas of Mustapha in the foreground, the city of red roofs and light tints several hundred feet below, the very blue Mediterranean beyond, and, to one side, the nearer peaks of the Atlas Mountains towered upward. The three meals and the good Tunisian wine

So much then, for the living-conditions; now for the photographic equipment. First, as to supplies, let me say that on the principal shopping-streets in the heart of the city there are several shops that carry films, roll and pack, manufactured by the Eastman Kodak Company and others; but, as I remember, there was but one first-class photographic supply-house that carried a really varied stock of cameras, lenses, chemicals, plates, films, papers, tanks and trays and that did photo-finishing properly for amateurs. This concern was situated on the fashionable shopping-street, the Rue Bab Azoum, and can be found easily by any visitor.

As for myself, I clung to my usual practice of ordering, from time to time, a supply of things photographic that I needed from the Eastman

Kodak Company, of Paris—no other address required—which came C.O.D. within a few days after mailing the order. For plates I liked the Eastman Rapid Orthochromatic—an English formula—that had about the speed of an Eastman film. Also, the beautifully clean and snappy Imperial Special-Sensitive. I used Imperial pyro-powders and developed by tank and fixed by Lumière hypo-chrome alum-cartridges, handy for traveling, which make about thirty-two ounces of fixing-bath per cartridge.

The light-conditions are about the same as at the latitude of Norfolk, that is on the thirty-sixth parallel of latitude. One should have, by all means, an exposure-meter of some sort, a Burt or McMurtry will do nicely provided that proper judgment is used to classify the subject with the former mentioned and some experience is had in seeing through the latter.

A tripod is essential for picture-making in the Arab quarters of the cities and oases for many of the streets are very narrow and badly lighted and the souks, or covered bazaars, are impossible to photograph otherwise. A good-sized changing-bag, tank, thermometer and camel-hair brush are necessary.

On this trip, I carried only my Richard Stereoscope, which made two negatives on a plate each measured but one and five-eighths inches square. Although this gave satisfactory results for viewing-purposes in a stereoscope, the negatives were a bit too small for much enlargement. However, I do get pretty good enlargements up to eight by ten inches if a soft-focus lens is used in the enlarger. If I were going again, I should use the next size larger stereoscopic camera which produces negatives two-and-a-quarter inches square. There is nothing like this type and size of camera to record realistically a trip of this kind, owing to the beautiful perspective that the matched lenses give when the pictures are viewed in the stereoscope. With this larger size, eleven by fourteen inch enlargements are made easily. I would also take a Graflex fitted with one of those wonderful new "Synthetic" lenses made by Pinkham & Smith Company, Boston, which gives just the quality of diffusion and drawing that is needed to put atmosphere and artistic interpretation into the picture. Of course one should practice with the lens and get to know all the charming effects that may be made with it before leaving home. This holds good with any soft-focus lens; for one used wrongly produces unsatisfactory results.

I do not for a moment mean to say that ordinary cameras, even a Brownie, are not worth taking, I am stating merely what I think would be an ideal photographic equip-

ment for a trip so fascinating and strange as this one proved to be.

The city of Algiers, as seen from an incoming ship, is theatrical in aspect. It is imposing in its whiteness, set as it is against green hills behind which are mountains. It rises from its attractive and busy harbor in terraces, the first of which is a high, handsome seawall topped by a palm-lined esplanade which is backed by a long line of architecturally fine blocks in uniform design that give dignity to the city. The white town spreads back and up the adjoining hills and, except for, here and there, a dome of a mosque and a minaret or so, the aspect is essentially European. It is, in fact, a modern French city surrounding an Arab city, which is tucked away on the hillsides directly back of the harbor and all but concealed by the hotels, shops and homes of the conquering race—the French.

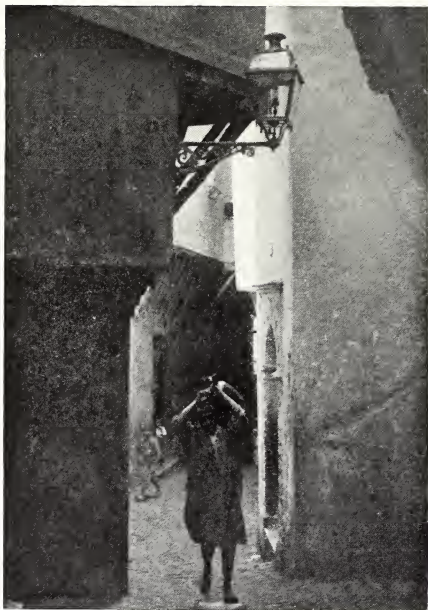
This European city with its well-kept streets, boulevards, squares, theaters, public buildings, churches, shops, cafés and apartment-houses has all the bustle and life of a little Paris. Its shops are enticing, its cafés inviting, its street-life thronging with motor-cars, electric trams, carriages and pedestrians. The general uniformity of its edifices is pleasing; in other words, it is a clean and attractive city, giving but little hint, at first glance, that it contains in its midst a section that takes one with a jump from the twentieth century back into the past ages—to old Bagdad in architecture and costume. Except for, now and then, the passing of an Arab in flowing robes, a Berber, Kabyle or Soudanese, one might well think himself in France.

In the suburbs, among the hills, are many fine residences belonging to Europeans and, in some instances, to Americans who winter here. These residences are situated usually in park-like private grounds abloom with semi-tropical foliage, the palm and the beautiful purple Bougainvillea being conspicuous. Some of these estates are truly palatial and many architecturally are Arab or Moorish in type, which are more in keeping with the land than those of the German, English or Italian school. The building-material is usually soft, creamy sandstone and the roofs are of tile—red predominating. On the upper heights of Mustapha-Superieur is an English golf-club, and, in the heart of the residential section, there is a good English library with all the latest novels and books of travel.

Algiers has a population of over one hundred and fifty-four thousand, of which one hundred thousand are of European blood. Thus the man with a camera will find plenty to record in a city of this size, even if he never entered the



STRIKING A BARGAIN
HERBERT B. TURNER



ARAB QUARTER, ALGIERS

HERBERT B. TURNER

native-quarter. It will be a wise pictorialist who "does" the European town first, for once he climbs up the steep streets to the Arab section it will be almost impossible to get him interested in anything else. One finds there amid a labyrinth of crack-like passages a city so weird and strange that it is hard to believe that it could exist outside of the Arabian Nights. Here amid queer Eastern architecture bazaars, markets, mosques, coffee-houses and odd little shops will be found a population of many dark-skinned peoples of the Desert and the Orient, of which the Arab in his impressive head-dress and variously colored robes is, without a doubt, the most picturesque; for with his tall, straight figure and mystical eyes he is a being that fascinates. The streets are thronged with strangely veiled women draped in white, wearing baggy trousers; with women unveiled and decorated

with barbaric ornaments of silver, gold and brass; with dancing-women in costumes of vivid colors; with women of pleasure garbed fantastically; with Kabyles, the ancient hill-tribe in yellow head-dress, and with Berbers and Sudanese, each in his native costume. It is like being behind the scenes of some immense musical show—only it is real.

In this very busy quarter the man with a camera will be in his seventh heaven of photographic delight; but he must work with care, for these people dislike to be photographed. Many of them believe that the camera robs them of a part of their soul. Their religion forbids the making of images, and they know the camera does that. A tripod must be used, for the passages are so narrow and the light is so poor that it is impossible to work otherwise. The only thing to do is to ascertain the best



ROOF-TOPS AND DATE-PALMS, BOU-SAADA

HERBERT B. TURNER

lighting, and after you are ready for an exposure pretend that you are adjusting something about the instrument and watch your opportunity for a picture. If you do not thus *steal* the picture, in all probability the subjects will turn their backs or cover their faces.

Algiers is the logical center for many very fascinating excursions that vary from a day to a month in duration. In fact, more than one tourist-company run personally conducted trips out of Algiers by rail or automobile to various especially favored localities. There is, for instance, a trip through the mountainous region where the Kabyles have built their hill-towns; and strange places they are. This particular excursion enters the Kabyle-country by Tizi-Ouzou and comes out by picturesque Bougie, thence returns by rail. Another is to Oran, a seaport of considerable importance. The short trip to Blida is a favorite; but, if one wishes to get a taste of the real Algeria and Tunisia, it is best to strike out alone. When it is remembered that there are on these southern shores of the Mediterranean more ruins of the Roman civilization than in all Europe—in addition to the present Arab and French towns of interest—one realises that there is much worth while to see.

Of course, the Sahara calls one; and, along its northern borders are numerous oases reached easily by rail or motor. One oasis-trip, made easily from Algiers,—but for some reason or other not frequently made by tourist visitors—is that to Bou-Saada. Twice a week a motor-driven mail-bus leaves Algiers at daylight upon which one may go, if reservations are made in advance at a cost of about six dollars for the round-trip.

The route for the first three hours takes one through a highly cultivated district which terminates at the foot of a spur of the Atlas range. For the next few hours, the bus climbs higher and higher up the range, passing through and above immense gorges. Arab-settlements and Kabyle-towns are entered and passed. The trail is in some places particularly scenic. At length, the summit of the pass is reached at a little over four thousand feet elevation, and at about two o'clock in the afternoon one arrives at the city of Aumale where a luncheon may be had at a hotel and a few minutes may be had afterwards to explore this half Arab, half French frontier-town of the desert. Leaving Aumale, one gradually approaches and gets on to the Sahara desert itself.



STREET-SCENE, BOU-SAAD A

HERBERT B. TURNER

It is a surprise to the American, who remembers his school-geography's description, to find that he comes to the desert at an altitude of two thousand feet and that it is not flat or sandy; but, here at any rate, hilly and of parched earth, covered here and there with low scrub. Let it be known—our geography to the contrary notwithstanding—that the Sahara is not an immense sea of sand. The desert extends from east to west about thirty-two hundred miles, and from north to south about fourteen hundred miles. In it are several mountain-ranges, the one near the center of the desert being about the area of the Alps; but, unlike the Alps, its peaks do not attain a height of more than eight thousand feet. The regions of sand form about one-tenth of the whole area—the rest being dried earth, large tracts of loose stones and pebbles, rocky plateaus and deep, dried river-gorges.

The one hundred and fifty or so miles of it that one crosses to the oasis in question, is over a good motor-road and every mile of the way has its interest, for instead of being an uninteresting trip it is very much to the contrary. Caravans are constantly being met, compelling the motor to be brought to a stop, while the camels are allowed to pass safely. Long lines of these

beasts are usually to be seen on the horizon tacking, as it were, this way and that. Bedouin-encampments with their low, squat tents of brown and yellow are met with and passed also, and roving bands of them are seen to move from one district to another, the women decked out in costumes of light green and magenta, the men in burnouses are seen to lead camels and donkeys laden with tents and household-goods; and pigs, goats and chickens follow on, as a matter of course. Later comes the sunset and a desert-sunset of gold, red and purple, brief as it is, once seen, will never be forgotten. Next comes the night, weird and frosty, filled with strange shadows; and, finally, at about ten o'clock, the walls of Bou-Saada are reached.

Bou-Saada groups itself on and about a hill at the foot of which is a small river trickling through a rocky bed, which in turn is bordered by groves of date-palms. The town is built of rectangular, whitish plaster and baked mud-houses with flat roofs, relieved now and again by minarets and by the cone-like roofs of the tombs of some saint. It has a population of about seven thousand, mostly Arabs and Moabites; the women of the latter drape their entire figure in bulky, dark-red robes so that even the

face is concealed, thus making them look like hobgoblins. The place is also noted for being the home of the Ouled Nail, a tribe which furnishes most of the dancing-girls of the desert. The women of the tribe deck themselves out in high, turban-like head-dresses of various colors from which the hair descends in decorated loops to the breast, the face is uncovered and usually slightly tattooed, and the rest of the body is clothed in very bright-colored raiment. Anklets,

always washing the household-garments, the principal thing to see is the weekly market. This is held in the big square of the town; and, when it is in progress, there are gathered the various venders of the town, and from many of the nearer oases to the south. It is a scene brilliant in costume, far more so than anything seen in Algiers. The Bedouins come into town and set up their squat tents, the Arabs bring their camels well laden with all sorts of food,



LOOKING TOWARD GATE OF THE DESERT, EL KANTARA

HERBERT B. TURNER

armlets and many chains strung with gold coin complete the costume.

That part of the large oasis near the public market-place and slightly away from the native town has a very small European colony made up largely of government-officials. The principal hotel is quite modern and comfortable, so that the tourist has no hardship to encounter and can remain a week or a month if he so desires, without sacrificing much in the way of living the life he would lead elsewhere.

In addition to the Oriental street-life, in which the camel plays no small part, the Eastern architecture, the Oriental café-life with its dancing-women at night, the date-groves, the river where the variously costumed women are

dress-stuffs, jewelry and perfumes, and the other tribes arrive with the hundred and one things they have for barter. No need to tell the man with a camera that here is wonderful material for pictures.

One day, I was wandering about the odd, alley-like byways, with my camera filled with autochromes, when I came upon a very attractive Ouled Nail girl standing by her doorway. She was decked out in light green and magenta, like some of her Bedouin sisters; but her head-dress denoted what she was, as also the loops of money, the anklets and armlets. I asked her to pose, whereupon she invited me to enter the courtyard of the house. We agreed on a price (ten cents) and she left me to set up the



GATE OF THE DESERT, EL KANTARA
HERBERT B. TURNER



tripod and camera. At length, to my amazement, she returned without any raiment, whatsoever, but with the various metal ornaments on legs, arms and breast. Of course, I made the picture!

Bou-Saada is a place that will stand out in one's memory for years—after one has visited it—as being distinctly worthwhile; and an artist could spend weeks there and then leave much undone. If we "knights of the camera" could make autochromes at one-fortieth of a second, what scenes of color we could record during Monday's market in this island of the Sahara! Why the motion-picture producers do not take their principal cast with them and go to such places, instead of building crude imitations outside of Los Angeles, is beyond my comprehension; for the building-operations must cost far more than the trip. Why stage South Sea idylls at Hollywood with negroes and blackened whites, when Tahiti and Samoa are within a few days' sail of California?

The most popular winter-resort in Algeria, aside from the city of Algiers, is the oasis of Biskra situated on the northern shores of the desert, one hundred and fifty miles south of the ancient and modern city of Constantine. The easiest way to reach it is by the railway night-sleeper to Constantine. The train leaves Algiers about eight in the evening, and one settles down in a very comfortable stateroom for a night's sleep to awake in time to change trains at El-Guerrah at seven the next morning where the Biskra train is waiting with a good dining-car ready to serve breakfast.

The first part of the trip south from El-Guerrah is through a barren country, then come some virtually dry salt-lakes, one of which the train passes through by means of a trestle. Next, a great pre-Roman tomb is to be seen, suggesting Grant's tomb on the Hudson, sixty feet high and one-hundred-and-twenty-two feet in diameter. At Batna, a good-sized semi-European town, one can break the journey and visit by motor the splendid ruins of Lamberse and Tingad. Lamberse was the headquarters of the famous Roman Third Legion, and Tingad was also a

frontier-city. Tingad, especially, rivals Pompeii with its arches of triumph, temples, theaters, baths and large residential quarter. Here the soft-focus lens will do wonders in recording artistically the standing columns and walls of what was once a splendid city. Continuing the trip south, the train enters a mountainous country which gradually hems the road-bed in until, near El Kantara, there is just room for the train to worm its way through a fantastic, barren gorge, the sides of which are hung with natural, weird gargoyles that resemble strange beasts with devilish faces.

El Kantara is reached at noon, and it is the wise man who again breaks his journey there and puts up at the attractive and comfortable, little French inn close to the railway-station.

There are but a handful of buildings in this strange gorge through which a stream runs flanked by the railroad on one side and a good road on the other. Following the road for a quarter of a mile, south from the hotel, the pedestrian comes out suddenly from the romantic "Gateway to the Desert," and there before him spreads out an immense panorama. At his feet lies an oasis of date-palms that contains three reddish adobe villages, primitive in the extreme but filled with great interest.

For a few minutes, the way lies down a steep grade and, a little farther on, one enters the first of these villages literally teeming with the strange people who inhabit it. From a slight hill, just beyond, one can photograph the village, its surrounding date-palms, and the mountainous mass and gate in the background. Down by the stream are also wonderful vistas of the flowing water overhung by palms with the same mountains and pass beyond. Strolling on, one comes to the next village, filled with odd byways lined with all but windowless shacks that breathe of mystery. A crude mosque or two are seen with crooked towers. By staying over, for twenty-four hours, the traveler has ample time to explore all three of these strange abodes of man, and he will find that it not only will pay him in interest, but the pictures he makes will cause amazement to those at home.

(End of Part I.)



The Art of Developing Prints



UNLIKE the scientific or the amateur worker, the professional requires to produce good prints quickly and in quantity, and with a minimum of waste. With regard to development, his first consideration is the developer, and in order to get the best developer for one's purpose it is necessary to know something about developers in general; and to do the best possible with any particular formula requires particular knowledge of that formula. I do not intend here to exhaust the qualities and peculiarities of the various developing-agents. They have all been well treated already and will be so again, and to consider them now would fill my space, but I would like to point out that these things are important to printers who wish to make the best of their craft. I have known cases where better results and also decreased expenditure would have been brought about by a broader knowledge of developing-agents.

The Developer

There is no universal best developer, and to get the developer that is best suited to our purpose we must consider our paper, the results we desire, and the conditions under which we work. For example, some papers answer better to their makers' formulae than to any other. Some demand a restrained solution; some do not. Some people like blue blacks and others prefer brown or olive blacks, and though this is largely a matter of paper and exposure, it can be greatly influenced by the choice of developer. Some workshops are always at an equable temperature, but others are so changeable that hydroquinone could not be used in them with any certainty of its regular action.

Given the agents to be used, their relative proportions are important. With a developer like metol-hydroquinone it is advisable to keep to the formula given by the paper-maker unless unusual results are wanted. The effects of changes in the proportions of the four active constituents may not be obvious, but they can be seen by experimenting with the quantities for metol and hydroquinone interchanged and by making decided differences in the amounts of sulphite and carbonate, particularly if the solutions are kept at a constant temperature and well used. To experiment at chance temperatures is to invite chance results, and to judge by first prints in a new solution is shortsighted. The proportions of an amidol-formula need not be kept to so strictly, but here, again, different

results are obtainable by decided changes in the proportions of sulphite and amidol. But although an increase in amidol can improve the quality of the first prints, those developed when the bath has been used for some time will fall off to a greater extent than is the case with less amidol in solution. And the continued use of a bath is one of the differences between the practice of the professional and that of the amateur, and necessitates the making of allowances that do not worry non-professionals. It is difficult to see how the "one-print-one-dose-of-developer" system could be used by the professional to deal with quantities, but a compromise is possible which enables the worker to get quantities of regular results without much allowance for the failing activity of the bath. This is done by commencing with a fair quantity of restrained solution and adding to it a small amount—let us say, an ounce to each pint—of fresh unrestrained developer after each print is removed. If the prints are small, only a small bulk will be required to cover them, and so only a small amount will be necessary and proportionate to freshen up. The larger the prints, the larger the bulk and the quantity of freshener necessary. But even when developer is "revived" the time of development increases with use. This can be overcome by keeping back hard negatives to the last, and overexposing the prints from them, thus counteracting the slow development and softening the results.

With normal bromide papers developed for pure blacks, the addition of potass bromide should affect only the time of development, but with some emulsions—notably gaslight—a modicum of bromide seems to be absolutely essential to prevent fog and stain.

Exposure

From a purely technical standpoint, there is such a thing as a correct exposure for every emulsion. This might be described as the quantity and intensity of light necessary to enable an active normal developer to precipitate the correct amount of silver—and little or none over—to form a pure black image of average density. Now this is all right for the person who handles perfect negatives exclusively, and desires pure black-and-white prints only, but the average professional does neither, and with him exposure must be a matter of art rather than science. For example, he may get a thin, flat negative from which is required a good print, his only medium being bromide paper, in which



OLD CHURCH NEAR CELERINA

case he will not go wrong in following the theoretically correct plan, for pure blacks are best in a case like this, and correct exposure is essential. With harsh negatives the best results are got by decided overexposure and development by careful inspection. If the solution be diluted so much the better for handling and subsequent color.

Working-Methods

Those who are fortunate enough to have a constant run of regular negatives can use the factorial method with advantage. With the former the time which gives the best result can be ascertained by experiment, but it must not be forgotten that if the same tray of solution be used for print after print, the time must be lengthened as the work goes on owing to slower action of the developer, due to the absorption of bromide from the prints and deterioration with use. A constant time is only reliable when the solution is renewed frequently. Using the factorial system, the time required for the first sign of development to show is noted and multiplied by a factor, which is dependent on the formula in use and the kind of result wanted. This factor, once decided by experiment, is constant. In deciding the factor we must take into consideration possible mistakes in exposure which are likely to confuse the decision. Therefore the best way is to start by testing for the

exposure which gives the nearest approach to our idea of perfection, developing by inspection. Then, using the same negative, light, paper and exposure, find the factor which gives the same result. If subsequent prints from any negative are too harsh or washy, it will indicate underexposure. If too flat or heavy, overexposure will be the cause.

A non-scientific method I have found to give great satisfaction, particularly with large prints, is to use a glass-slab and swabs of cotton instead of the orthodox tray. The print is first laid on the slab and soaked well by applications of water with a swab. Development is carried out with another swab soaked in weak amidol, a small tray of which is kept within reach. No note is taken of time, the action being hastened or retarded by alternate applications of developer or water as one sees the picture grow. Provided the exposure is full without being too full, it is very easy to get the best possible result this way, and in the case of large prints—20 by 30 inches up—fixing, washing, and toning can all be done the same way. I have found an old glass-door from a cabinet to be much more serviceable for this work than trays, one point—not the least important either—about it being the ease with which cracks and creases are avoided when working with large sheets of thin bromide paper.

THERMIT, in *The British Journal*.

The Picturesque Motive in Photography

EDWARD R. DICKSON



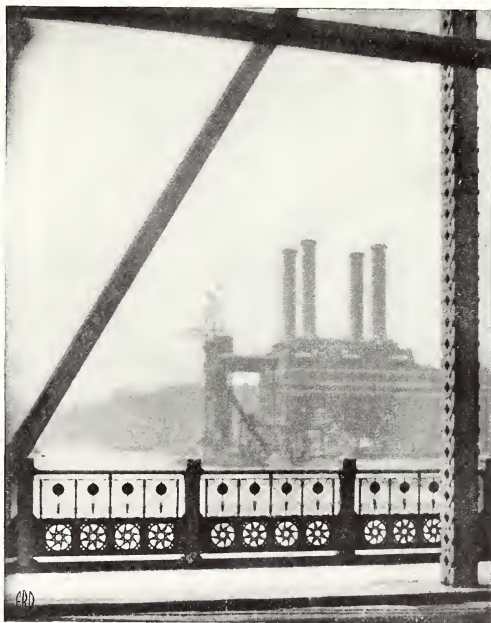
Do you think your reputation or success as a pictorial photographer with an individuality will ever stand if you depend upon or base your work on the constant employment of the picturesque motive, or upon the picturesque locality in which you live? By picturesque, I mean that which is so stirring or so spectacular as to be so obvious that it can never escape the eyes of the hurrying crowd; or that which is abundant in mere sentimentality.

What you do in a picturesque way may thrill the spectator temporarily; but it is with the duration of this emotion that we are concerned. Pretty scenes remain pretty for a while; but our deeper selves require more.

When we turn to many of the plays and many of the novels which were written several years ago, why do we like so few of them now? Because so many of them were written on senti-

mental grounds. Why should we wish to use so old a device now? Well, the corresponding meaning of "sentimental" is, in our photography, what I wish to term in this article the "picturesque motive," and it is a fact that if we turn from the sentimental in literature, we shall certainly turn from the picturesque motive in photography.

Suppose for a moment we look back at our progress in art and compare what we here in America have done. In the beginning of the year 1882, there was but one exhibition of paintings in the United States, and this was a display, collected from all over the world, of four hundred and twenty-five works of art by American artists and shown at the Academy of Fine Arts in Philadelphia. Just compare the difference to-day. Why, in a single season of 1920, I dare say that there must be nearly four hundred and twenty-five exhibitions held throughout this country. But what did our



THE FACTORY

EDWARD R. DICKSON

painters then show? And what I shall say about their work then, will apply equally to the exhibits shown during those times in London, Edinburgh, Antwerp, Vienna, Moscow, Rome and Paris. Their subjects were, for the most part, "The Lovers in the Field," "The Course of True Love," "The Pensive Daughter," "Granny's Needle," "Good Night to the Flowers," and lovers engaged in "A Song to the Moon." So much and so eagerly did the artists run the gamut of the sentimental, that a critic remarked—of the seventeen hundred paintings by seventeen hundred living artists shown that same year in London—"the exhibition produced no painting or work of sculpture that will make it memorable." If we should ever be unfortunate enough to see any of these pictures to-day, we would get from them no thrill, no throb, no ripple, and we would simply wonder why such capitulation should have been made to such

motives. We turn from them to-day, because with riper individuality we are seeking things which do not so easily and readily stir the multitude so feebly as the picturesque or the sentimental motive.

We, here, in New York are deprived of much of that which is spectacular. We have buildings which are regarded by many as being ugly. Sometimes, these buildings represent themselves to us in their elemental and rarely in their pictorial dresses; but in them we have material for exercising our sense of design, and an opportunity to avoid all tendencies to become submerged in this picturesque wave. We know that they are hard and quite matter-of-fact; but they do challenge us to find their beauty.

From other States and various country-places, we have seen and have sometimes been moved temporarily by photographs of unusual and spectacular scenes. You will see great trees

and vast shores, and the photographer will further enliven your vision by relating some rare adventure or romance in connection with these places, and you listen and are just thrilled by what he has said—longing for an opportunity which will allow you to photograph such wonderful views, and you perhaps say: "Oh, dear me, if only we had such places here, what lovely pictures I would make." The humor of the whole thing is that wherever you may be, you have greater pictures if you would but see them, and that as these obvious spectacles are seen and photographed by everyone who passes by with a camera, where does distinction come to the photographer?

Now let us see what these photographers of the picturesque are doing, and let us see in what way they are making works of duration. I believe a work of art should have the individuality of the worker stamped thereon—by individuality I mean that which makes him see with such freshness and with such distinction and with such beauty of spirit that it becomes difficult for another to see or to make the same thing. Can this be said of the photographer of the picturesque motive who is generally moved by the same thing which has moved hundreds of tourists? He may secure, through long or perhaps brief, intensive experience, a viewpoint slightly different, or, for that matter, greatly different from that of the strolling tourist; but doesn't the picturesque motive remain quite unchanged? Has not the same impulse dominated them all? Where, then, is the distinction of impulse necessary for beauty of expression? I grant also that one photographer may have a better technique than the other picturesque worker; but that is not the question. We are concerned with the motive, the governing motive; for it is the motive which is going to make us distinctive and which is going to make our work correspondingly distinctive. Of what good is it to be a pictorialist, if we are going to photograph a scene which so many photographers have done from the same viewpoint? When I say this, I am aware of the possibility of photographing a hackneyed subject from a fresh point of view; but I do not even mean this; for I am referring to the motive or the attraction such an object offers to the fine senses of the photographer. I do not care very much what the subject may be, so long as it is the finest kind of a personal appeal from the artist; for after all, we are endeavoring to evoke emotions regardless of the stimulants of production. We want to get our own impressions from that which has inspired us and we want to synthesize the tumult of these impressions into an harmonious,

photographic whole. We should make our choices simple and, through our knowledge of art-structure evolve, mind you, through a spiritual insight that which has clamored for expression. Let the product of our camera give us an inner and a tremendous delight. We can do this by gathering fresh thoughts from our readings and from the sight of things around us; observing much, noting everything, from the lowliest to the mightiest, and in this manner we shall spurn the picturesque motive and simply say: "this is not a personal call intended for me, but a mere attraction for the transient, touring record-seeker." Mediæval towns, however often photographed, will not develop your individuality, nor will fire-scenes, spectacular scenes, sleeping beauties, favorite cats or dogs, nor anything which is "a remarkable photograph," as the newspapers say.

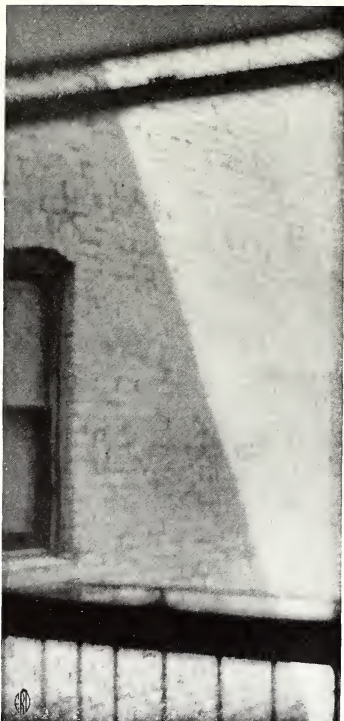
While photographing, I have often had some of the richest experiences one could ever have. Through my camera I look at subjects from all angles, often going down on my knees so that I may enjoy every nook and corner of my groundglass. I have often placed my camera in such positions, that if my pictorial friends were ever to see me, they would be filled with horror at all the rules I have broken.

One day, when getting something which had so intrigued me that I thought I would ever be unhappy without it, I placed my camera downwards with the front leg of the tripod at an angle of ninety degrees. I paid no attention to laws of gravity or any other law. It was not the proper time. In making the exposure, however, I soon found that my slide would go in but partly. It would go in, but seemed to stop about three inches from the bottom. Getting exasperated, I finally decided to withdraw the slide entirely and to look at the holder in broad daylight, and in doing so, discovered that I had tilted the camera to such an extent as to have caused the plate to loosen from its fastenings and fall into the bellows. The exposure was made with another plate and greater care.

When out making photographs, patterns of light are generally quite important to me. Then comes regulating of the different parts from a standpoint of structure; and when I have the light where it is actually rejoicing, and the structure of my picture functioning harmoniously, I make the exposure, and although I cannot verbally relate the experience inwardly felt in such a choice, it is always aesthetically beautiful. After the exposure has been made, and while I am feeling the thrill of all this beauty, I look at the scene again, through the lens, and on further studying it and imagining what it



THE DANCER
EDWARD R. DICKSON



PATTERNS

EDWARD R. DICKSON

will look like on photographic paper, I clap my hands, pick up the camera and start off with swift steps. I have often wondered what would become of me, if an onlooker were ever present on such an occasion. Well, I do not think that such a feeling would ever be able to come to me if I were interested merely in the picturesque motive, where structure would be denied me.

Let the worker in the picturesque motive go on. We may admire his picture and say "how pretty it is"; but we shall soon feel that, after all, life is circulating only in a part of its organism, and what we want is life in the entire organism. We shall say that it is beautiful in a local sense, and be charitable in admitting so much.

As we have seen what time has done to other works of art already enumerated, and which have as their basis the picturesque motive which gives no lasting joy to the progressive worker, it is logical to believe that the same thing will happen to photographers who work in a similar manner. The worker in the picturesque motive will satisfy those who are stirred by the romance of mediæval houses, streets, and remarkable and unusual scenes. But come, let us seek quieter scenes and unto these place the stamp of an individuality which will make them undeniably ours. Let us dig deeper into the well-springs of our photographic expression and make beautiful pictures, using as our vehicle an intellectual and a spiritual attitude which goes to the heart of all things—the keynote to greater expression.

In the accompanying picture, "The Factory," I thought it best to treat the theme in a decorative way. The building of itself conforms to no particular kind of beauty, and to have filled the space with it completely would have made an arid picture with the base of the building looming up too large for proper drawing of the smokestacks. On seeing it enveloped in an atmosphere of quietude, I determined to photograph it but soon found that such a quietude alone would not be quite characteristic of its own life. So I used the far side of a nearby bridge as a decoration and, by focal determination, made such emphasis as to create an agitation of the scene by reason of the contrast of quality between the horizontal structure of the bridge and that of the factory. To enliven the space-area further, I included the geometries of the upper structure of the bridge. On account of the proximity of these structures, and the distance of the factory, a fine adjustment of focusing became necessary, as well as that of a fullness of exposure in order to take care that these verticals receive such an amount of light as to give them quality as distinct from blackness.

In the picture, "Patterns," I found sunshine and shadow making interesting shapes on the wall across my window. The picture was made in this way: The dark, horizontal lower line is that of the iron structure of the fire-escape, and I have used as an element of decoration the vertical lines underneath, and this is used in just as similar a way as the line of the bridge in the other picture. Then, the dark line of window at the top of the picture was included and, in order that there be no white space carrying the eye out of the picture, the window-shade was drawn down just a bit above the line of the window. The white space between was wanted to echo that at the bottom of the composition.

In "The Dancer," the spirit has been allowed



A PAUSE IN THE DANCE

EDWARD R. DICKSON

great freedom and the dancer placed in such relation to the trees as to give an impression of height and vast stretches. The light quality of the over-hanging bough corresponds with that of the rock dappled with sunlight, and the rhythm of the picture is found in the boundaries of the trees and the appealing attitude.

If ever one wants to feel the need of synthesizing tumultuous emotions, it is when he is out in the fields with figures. It is a matter of simplicity always, and of deciding just where you are going to throw your emphasis and what you will have the figure do for you. You dare not utterly disregard the landscape, for it is always obvious. In the instance of "A Pause in the Dance," the figure has been used to repeat the vertical lines of the trees; and, in order that this vertical emphasis may be further felt, I simply asked the dancer to extend her arm upwards, and then placed her at such a distance

from the trees, as to make these factors take their proper focal position. The light-vibrations have been retained through fullness of exposure.

Whatever may be the object of our selections, the pictorialist has to apply to these objects the artistic principle of unity—hence comes our composition, or the making of the eye subservient to the will of the artist. We shall ever have to do this, if we are going to use the only vehicle, that of the eye, as a means to awaken or touch our other emotional senses; and the quality or duration of this awakening depends upon the extent to which the intuition of the photographer is transmitted, and how successful he has been in subordinating various elements of nature to his selective will.

And this is why the spectacular or the picturesque, being the object of common surprise or common property, cannot be embraced in the personal and selective will of the artist.



SNOWBALLING
WILL CADDY





A TODDLER IN THE SNOW

WILL CADBY

Children in the Snow

WILL CADBY



NOW is snow all the world over. Its glittering effects, whether they appear in the Old or the New World, are fundamentally the same. Local differences of country may modify results, but they do not materially alter the procedure of the photographer. That is why the Editor has asked me to record my experiences of photographing children in the snow for readers of PHOTO-ERA MAGAZINE, although I have only so far worked at this subject in Switzerland and Norway. In England, it is only once or twice in a life-time that there is sufficient and prolonged enough snow for the purpose, and

even then the chances are that the weather would be too inclement to do any serious work.

Portraits and studies of children in the snow can be so varied, that the possibilities for interesting pictures are almost unlimited. "Every picture tells a tale," as the advertisement puts it, and so it really is with children in the snow; for if a particular attempt fails, perhaps, as a picture, it still "tells a tale" as a likeness to all those who know the model. And so almost all the results obtained are valuable.

First of all, we must consider what children are likely to be doing out of doors in the white landscape, and we shall generally find that some

kind of sport, simple or complicated as the case may be, is sure to preoccupy them, and so a good deal of our work should introduce these amusements. From snowballing to ski-running is not such a far cry as it sounds, and the intermediate games all offer attractive opportunities for photographs. There is no denying that children can be made to look quite ugly on the snow; but this is invariably the fault of the camera or, more truthfully speaking, the photographer by having chosen a bad light, or he may have spoiled his subject in some other way, such as a wrong exposure or an unsuitable background.

Let us think of the lighting for a moment, as it is the most important factor—far more so than most people seem to think. If we want an absolute portrait, the nearest approach we can get to the ordinary thing, the snow will accommodate us, and we must choose a sunless day. There will be no shadows, the surroundings will be comparatively flat, and we shall do well to get the face against the distant background of snow on which there must be no dark patches. If the exposure—which we shall discuss later on—has been correct, the whole effect will be gentle and soft, and no attempt should be made at a strong rendering of the gradations in the snow, for it would be out of place. In such a picture, we shall have accurate drawing of the features in a soft, flat light, almost a sketchy effect, and very similar to what we have arranged in our studio-room for children, where walls, ceiling, background and floor are all painted white. Indeed, often, when we have been trying portraits in the snow under these conditions, we were reminded of our work at home, where both of us have our allotted tasks, one amusing the children and keeping them in the right position, while the other manages the camera.

Directly when we leave comparatively ordinary lighting, there are many varieties of effects to be attempted. The sun with its decorative illumination of all objects may be used to good purpose. Of course, difficulties creep in, such as the dazzling light on the child's face, which is all too likely to make the model screw up his eyes; or it may be that the face will be represented too darkly. Sunlight-portraits *can* be highly effective, but they also *may* be extremely ugly, and under such conditions much care and observation are necessary. It is not always the subject that looks pleasing on the groundglass, or through the view-finder, that will make a good photograph. If the surrounding snow is rough, and with its shadows makes a pronounced pattern, we must see to it that the lines of the pattern harmonise with the

figure. This can be done by shifting the point of view until we have coaxed them into lines and curves that do not run abruptly out of the picture. The sun can be used advantageously at varying angles, and the nearer we actually face it, the more startling will be the effect. But here comes in the absolute necessity of a capable and extensive lens-shade, a bit of apparatus that we never discard in the snow. This is undoubtedly a little extra trouble to work with, but well worth it, not only for screening the actual rays of the sun from the lens when the camera is nearly facing it, but for cutting off the surrounding glare of light that in a snow-covered country is reflected almost as much from the ground as from the sky. Our particular sun-screen or lens-shade is made by Mr. Sinclair of the Haymarket, London. It consists of a neatly constructed collapsible bellows, which, with one small thumbscrew, is attached to the lens-front. The bellows can be regulated, that is to say, it can be as long or as short as we wish, and care must be taken that it does not protrude into the picture. With the sun-screen in position, and when the sun was fairly high, I have been able to do landscape-work directly facing the sun, getting the view immediately below it without flare.

It is advisable not to attempt to photograph children when they first come out of doors. Let them have a chance to get warm and interested in their games. They will look all the better both in expression and figure, and their attitudes will be far more spontaneous and natural. If they are experts on their skis or their skates, or whatever the sport may be, it will make the photographer's work much easier; for they will be able to stand where they are wanted, or even perform some simple evolution. In short, they will be firm on their feet and have their bodies under control. It is useless to hope that the children will not know what is going forward; for nowadays even infants seem familiar with the camera. We had been doing a series of photographs of a boy of five years of age on skis. He was persuaded to do a telemark and a kick-turn, and to side-step up a steep bit of snow—"just for fun," as it was put. He did it all beautifully, and apparently oblivious of us and our camera; but, turning sharply after our sixth exposure, he asked, "Is that the last one?"

Exposure in snow-portraits is, or should be, a serious matter. The results of underexposure are simply hopeless, for a chalk-and-soot rendering is unforgivable. In reality, the shadows and comparatively dark objects are full of detail and far from black, and the delightful highlights are ruined if clogged up and lost in too much density.



THE ARCTIC EXPLORER

WILL CADBY

Better are the dull, flat, drab results of over-exposure, for, if not too hopeless, they can be reclaimed, but not without a great deal of work. Hence, it is very necessary to get somewhere near the right exposure. But even with snow-subjects there is considerable latitude as to exposure with present-day plates, and we have only to be careful not to grossly over or under expose, but full exposure is to be aimed at. Rather a general idea seems to be that you cannot underexpose in the snow. This of course is quite wrong, and probably seventy-five per cent of the hand-camera snapshots made in the Alps each winter are underexposed. I have examined many of them, and the majority generally show this defect.

We are fairly old hands at photographing in the snow, but we never begin work without testing the light by means of an actinometer (usually the Imperial book form). This is an extremely simple and handy contrivance. When testing the strength of the light one has only to remember the H. & D. speed-number of the

plates one is using. Of course, after a day or two's experience with the exposure-meter, it becomes easy to judge the light at a given time of day, say in sunshine, and rule-of-thumb work is then practicable. It is useful to remember that near-up subjects, such as children photographed large on the plate—often with dark clothes on—need a much longer exposure than one would naturally think necessary in the bright snow-light. An exposure that would hopelessly overdo big, white mountains, even in the middle distance, is necessary if we are to get good gradation in the large figures, possibly only six or eight feet away from the camera. These observations seem trite and, perhaps, over-laboring the point; but experience has taught us that not only beginners, but even those who have had considerable practice, are inclined to underestimate the exposure necessary for near-up, dark subjects in the dazzling sun-lit snow. We, ourselves, have not been innocent of offence in this way.

And now we come to development. Pre-



HIS FIRST EXPEDITION

WILL CADBY

suming that a goodly number of our readers have skipped the London Letter in the October issue of this magazine, we may, perhaps, be forgiven if we quote a developing-experience that we there recorded, as bearing on the subject in question:

"In our photography, this summer, we are using the same brand of plates (Kodak Portrait-Films) as we employed at this same high mountain-village last winter, and again Kodol is our developer. The temperature of the darkroom and the water, in January, was fairly low, and it took usually more than twenty minutes with correct exposure and normal-strength developer, to obtain proper density. We began our work here this summer in a hot spell of weather. The spring, some miles further up the valley, from which the hotel-water is brought in pipes, had got warm in the hot sun and, in consequence,

the developer was at a high temperature. In five minutes, we obtained full density with all factors exactly the same as in winter, with the one exception of temperature. A week or so later—after a period of rain-storms and cool weather—we found ten minutes none too long for development, using the water as it came directly from the mountains. Of course, the reader has the right to point out our carelessness in not carefully testing the temperature of the water both in summer and winter, and artificially rectifying nature's extremes. No doubt, it should have been done, although the traveling camera-man in Europe has quite enough to do to get his impedimenta to the desired destination without any more complications. But apart from this, it emphasises the already known, but not always realised, fact of the immense importance of temperature."

We have not had practice enough to know if all developers are as susceptible to variation of temperature as Kodol; but our experience serves well enough to remind beginners that they must remember the marked effect of temperature on development. Repeatedly, we have been shown negatives made during the winter in Switzerland that bore all the recognised signs of underdevelopment; and, when we have suggested this as the cause of their unsatisfactory appearance, as often as not came the answer from the none-too-scientific photographer, "I developed them a very long time." Most probably true, but in a *low-temperature solution*.

Development of snow-photographs is carried out just as other work. Unless we are making

pictures only for the press—where very bright prints are required—it is safer to dilute the normal developer somewhat, say about half of usual strength, and develop longer, as it increases our control. A little experience, however, will soon show the worker the method best suited to his particular needs.

It is necessary to do our very best technically when photographing children in the snow, or we may be disappointed. Mistakes are more evident than in ordinary landscape, and if we go seriously astray in exposure, the beautiful, brightly colored picture we saw on the ground-glass may, in the black-and-white rendering of the negative, be both disappointing and tremendously discouraging.

Fundamentals of Print-Criticism and Appreciation

Part Two—Necessary Standards

AUGUST KRUG



THE all-important item of the critic's equipment is his set of standards; his criterions—what he "goes by" when he judges. As there is nothing new under the sun, so there is always a standard by which any product may be judged, or to which it may be compared favorably or unfavorably. To illustrate: There was a man who, at the end of his meal, inquired of the waiter who had served him, "And how is the coffee to-day?" "Fine, sir," was the response, "just like Mother used to make." "In that case," directed the diner, "better bring me a cup of tea."

Unfortunate waiter, with his inutile comparison! Equally unfortunate critic, if his standards be not sane, progressive, just! For it is a fact, that otherwise capable judges are sometimes so subject to bias on certain points that they are hampered seriously in well-meant efforts at impartial criticism.

For example, there is no one better equipped by training to judge of the technical excellences of a print than the photographer who also makes prints, and is familiar with their possibilities and limitations. But he may have a prejudice against so-called underexposure, or against gum-prints, or against fancy lightings; and, while human nature remains what it is, he cannot criticise fairly a gum-print from an untimed negative of a line-lit subject; he cannot, that is, unless he makes a conscious effort to subdue his

prejudices and put them where they can do no harm to himself or to others.

Then, too, the set of standards should include none that is not sane, in the full sense of the word. It is to the critic that the photographer should look to keep him on the main road and out of the by-ways of incoherent, meaningless efforts. Sanity and clarity of vision are required for this part of the critic's job. He should be a conservative progressive—if the terms are not too contradictory—and he should encourage effort which leads to the betterment of the best in photography, and take no notice of blatant work that tends only to the aggrandizement of the maker.

Now what standards are there by which we can classify a print, determine whether it is good or bad, or whether—as most are—it is "just mejum"? First, the print should be taken as a whole, looked at in its entirety. Its beauty may "jump out at you," as the saying is, or it may be more delicate and require careful search. Is it original in theme or treatment? Or is it a poor translation of a hackneyed subject? Most important of all, does it say what it aims to say? Is it *definite*? If not, study it to see how it can be improved. Perhaps, the fault lies in the technical work.

This standard, as has been said, is one that is familiar to every photographer. Which of us does not know good technique when he sees it? That, however, is not the only requirement

under this head. A later article will take up in detail this side of our subject.

Or, perhaps, the print is deficient artistically. That is, it is defective in composition or design. The photographer may be fortunate enough to be born with acute artistic perceptions; but most of us acquire those that we possess by a laborious period of study, with the assistance of the famous partners, Trial and Error. There is plenty of good literature to be obtained for the student of the artistic side of photography. No doubt, the Editor will be glad to make personal recommendations as to suitable books.

The principles which govern truly artistic work are better understood now than ever before; and, by a greater number of people. Beauty is widespread, and the capacity to appreciate it is common property. However, this very universality is the cause of confusion due to the establishment of slightly differing criterions. There will be differences of opinion always; and I, for one, do not advocate "following the band wagon" continually. Let safe progress be the rule, with one eye open for first principles.

Then, there is the standard of lens-performance, a moot-question ever since Daguerre ordered his camera. There are as many different opinions on this point as there are photographers to express them. Briefly, it may be said that everything seems to go nowadays. It is the critic's business to see that everything goes right. More of this later on.

Choice of subject is important to the photographer; but it should make little difference to the critic. I have heard men say, "I cannot criticise this print, because the subject does not appeal to me." This is manifestly an incorrect attitude—our old friend prejudice getting "in itsicks." Moreover, it is just as wrong to let our admiration for the subject-matter blind us to defects of the print which with a less favored subject would inevitably lead to condemnation.

For instance, at the present time, there is a great deal of photography of the nude being done. When properly carried out, there is nothing more beautiful than a pictorial photograph of the human form; but how often is it well done? Most prints of this sort have absolutely no cause for being. They are accepted at exhibitions, usually, for one reason only; and that can hardly be laid at the door of Art.

This kind of print surely has power of suggestion; but I do not want to write about that sort of suggestion. The kind I mean conveys a mood, portrays an impression. Does the snow-scene make you want to turn up your coat-collar? It has merit if it does, no matter how deficient it may be in technical finish, or how

many laws of composition it violates, or how little you care for the subject. Its maker has transferred to paper the feeling of cold. Then, there are other standards—perhaps, not so well known as those we have considered—which will be mentioned in later articles of the series as we come to them.

Of course, each critic has his own method of criticism—his individuality coming into play quite as much as that of the photographer. Thus, one man—a materialist—will esteem technical excellence of greater importance than any of the other standards enumerated and he will be inclined to overlook what might seem, to a more sensitive man, very grave artistic errors. It would be well, therefore, to try to arrive at some definite relationship between the various qualities which go to make up the perfect print. To my mind, technique and artistic quality, design or arrangement are of equal importance. Lens-quality comes under the head of technique to a certain extent; but choice of subject and originality of treatment must be considered.

Assuming that the perfect print totals 100 points, suppose that we divide this among our standards as follows:

Choice of Subject.....	10
Treatment of Subject.....	10
Suggestive Power.....	10
Technique.....	30
Art-Quality.....	30
Allowance for Special Merit.....	10

The last item may require explanation. It is intended for exceptionally good or difficult photography or the working out of unusual art-problems. For instance, I would be inclined to award the ten points to, let us say, a 16 x 20 bromoil or some such feat of legerdemain. An allowance like this would prevent all but perfect prints from reaching 100 points.

Of course, the table is given simply as a guide, and is not intended to be used in actual criticism. Additional standards can be added at will, if necessary. The critic, although not actually employing the "point-system" verbally, should take the trouble to fix firmly in his mind what he has determined upon as the relative importance of the various standards.



WHEN you see a genius with long hair, don't suppose you will be a greater genius just because you let your hair grow longer than his. Genius and long hair may sometimes be co-existent, but they are not identical.

A. SEAMON STER.



EDITORIAL



Bargains at Auction

IT was not until the Editor had watched the sale of several articles at a Washington Street (Boston) auction-room—a continuous daily performance—that he understood and appreciated the real character of the business conducted at these places. The managers understand perfectly the weaknesses of human nature, particularly of the ignorant, the uninitiated, the gullible. Their resourcefulness and daring are, indeed, remarkable. The Editor, willing to be convinced, became interested in a pair of marine-glasses made, as the auctioneer blatantly declared, by “Chevalier of Paris, France.” The bids, begun at one dollar, slowly reached the maximum of seven dollars—the “powerful” French binoculars were sold to the Editor, who, however, had previously noted on the rim of each eye-piece, in relief and in dull-black letters, the maker’s name. Having paid the required amount, he examined closely the letters indicating the source of the manufacture, and found them to lack the finish that he had expected, but attributed the circumstance to conditions of the war, when supreme excellence could not always be assured. He then went out into the street and tested the magnifying-power of his purchase, making use of an elevated sign about one-half of a mile away. The apparent size of the object and that of the image were the same! The binoculars also failed to bring the image nearer. The lenses were powerless—devoid of any magnifying-quality. He took the worthless instrument back to the salesman, who insisted that it was made by Chevalier of Paris, as plainly indicated on the eye-pieces; that it corresponded exactly to many others of the same model he had sold, and that no one had yet complained—in short, to take them back and return the money was out of the question. The Editor subsided and went into the rear-end of the room, where he conversed with the manager and convinced him that he was wrong—that the glasses never originated with the famous optical firm of Chevalier. He told him a few other things, left the glasses, and was given the full amount he had paid!

Now, in these same auction-rooms, are sold cameras of various styles and makes, generally—I am reliably informed—at prices much higher than their actual value. And, as there are auction-rooms similar to the one described in

every large city in the United States, it behooves searchers of photographic bargains to be on their guard. Real bargains in cameras and lenses may be found at legitimate photographic dealers, or at camera-exchanges, where, if a purchase should not prove as represented, it may be returned, exchanged, or the money will be refunded.



Profitable Sideline for the Amateur

THE wail, “How can I make my camera pay?” is still heard occasionally, but it does not appear to meet the formerly quick response. The amateur of genuine skill, taste and energy, who desires his hobby to become a source of revenue, utters no cry for help, but quietly proceeds to find a lucrative means of activity through his camera. Numerous opportunities of the right sort are open to the accomplished camerist. The management of a house-organ offers a splendid field for his ambition. We received recently a copy of an attractive monthly magazine, about 5 x 7 inches in size, devoted to the business-interests of a well-known hardware-firm. Its contents of thirty-two pages consisted of news-items; stories about members and employees of the firm, and topics of the day, interspersed with excellent halftoned photographs. This little magazine is distributed among the customers of the firm, and others likely to be interested in its products. It is prepared and edited by one of the firm’s employees—a skilled amateur-photographer, a good writer and a humorist. This illustrated house-organ—it is nothing else—yields the firm more business than is derived from newspaper-advertising. This or a similar form of publicity is being used by other business-houses, by department-stores and banking-institutions, notably the Guaranty Trust Company of New York City. In some cases, however, the photographic part is very faulty, showing the need of expert photographic knowledge and skill. To remedy this defect, the capable amateur-photographer should enter and take charge. It is unnecessary to go farther. The above examples should suffice to start the energetic camerist on his way. Let him help himself to these waiting opportunities.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface are not suitable for reproduction, and should be accompanied by smooth prints on P. O. P., or developing-paper having the same gradations and detail. All prints should be mounted on stiff boards.

3. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.**

4. **Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. Be sure to state on the back of every print exactly for what competition it is intended.**

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Domestic Pets Competition

Closed November 30, 1920

First Prize: None awarded.

Second Prize: John Smith.

Third Prize: J. Kirkland Hodges.

Honorable Mention: Linda E. Cattell; Mrs. Maude Lee Eldridge; Miss G. Finnie; G. W. French; George W. Gould; Charles T. Graves; J. C. Lindsay; Alfredo Melina; Arthur C. Miller; Louis R. Murray; Alexander Murray; Dr. Hannah C. Myrick; John T. Roberts; Walter R. Rose; J. Herbert Saunders; Henry A. Stanley; E. Von Tilzor Struthers; Elliot Hughes Wendell; H. M. Wilson.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.

"Home-Portraits." Closes February 28.

"Copying Works of Art." Closes March 31.

(Paintings and Statuary.)

"Home-Scenes" (Interior). Closes April 30.

"Street-Scenes." Closes May 31.

"Summer-Sports." Closes June 30.

"Summer-Flowers." Closes July 31.

"Shore-Scenes." Closes August 31.

"Outdoor-Genres." Closes September 30.

"Architectural Subjects." Closes October 31.

"Domestic Pets." Closes November 30.

"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

IN deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Must Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know? Besides, the Editors are too busy with other matters to stop to write to the careless competitor for missing information.

This is often the reason why careless entrants wonder what has become of their prints.



FIGHTING TOM

SECOND PRIZE—DOMESTIC PETS

JOHN SMITH

Printing-Efficiency

A most important step toward efficiency in the printing-room is the choice of the grade of paper to suit the negatives. In this note we will endeavor to explain why it is not practicable to manufacture an "all-in-one" paper of the development type that will give perfect prints from all kinds of negatives, from "ghosts" to "soot-and-white-wash." Our friends must bear in mind the fact that all development papers have, apart from their speed, a definite scale gradation characteristic to the grade, some long and some short, and very little can be done in the way of modifying the developer to alter this scale, excepting at the expense of the color of the print.

Scale of gradation may be described as the rendering of steps of density, which are steep in the case of vigorous papers and gradual in the soft papers. We are told that theoretically the best grade of paper to use is one that will correctly reproduce the actual gradations of the negative, but as we have not reached the stage when "perfect" negatives are the rule, we must perforce adopt another dictum. In our opinion the best rule to follow is to endeavor to reproduce the actual gradations of the subject itself, as we may very frequently require to purposely falsify the gradations of the negative. It may be that for some technical reason the negative is poor, underexposed, or underdeveloped, and in order to get a correct rendering of the subject recourse must be had to the use of a vigorous paper. Similarly a negative that is harsh in contrasts will require a soft paper.

A great deal of misunderstanding exists amongst

printers in connection with the words vigorous, normal, and soft. The terms are intended to describe the actual scale of gradation given by each grade, and must not be confused with the appearance of the final prints. A soft paper will yield a print from a good strong negative quite as brilliant as a vigorous paper will produce from a thin negative. If a negative is very dense it does not always follow that a soft paper should be used, as perhaps much of its density may be due to inherent fog, or overdevelopment, so that the actual scale of gradation may be long and require the use of a vigorous paper. Also, a thin-looking negative that has been developed with pyro-soda without sulphite may actually require a soft paper to produce good results.

Careful printers who are eager to obtain the best prints from all sorts of negatives that come their way will have at hand all three grades, but considerable experience is required to choose correctly the grade which will give the best result. As a guide we give below a description of the types of negatives most suitable to the particular grades, subject to the reservations above.

VIGOROUS PAPERS.—Suitable for very poor, thin negatives of weak contrasts.

NORMAL PAPERS.—Suitable for negatives on the thin side, but with good detail and medium contrast.

SOFT PAPERS.—Suitable for negatives of harsh contrasts, and also for what is termed "good" negatives such as the high-class portrait-photographer produces.

Although we are particularly referring to gaslight-papers it must be borne in mind that bromide papers are also made in different grades, vigorous and ordinary.



DINNER-TIME

J. KIRKLAND HODGES

THIRD PRIZE — DOMESTIC PETS

Most printers are now well aware of the great change that has taken place in the manufacture of slow development papers of the gaslight type. These papers have always been regarded as suitable only for printing amateurs' underexposed negatives, and gave hard black-and-white results, but the modern gaslight-papers will do as much, and more, than bromide with many added advantages.—*Rajar Limited.*

Gaslight-Paper and Damp

We are getting to the time of year, says an English cotemporary, when there is most likelihood of trouble from damp, and a word of warning may be given in connection with gaslight-paper, which seems particularly susceptible to injury from this cause. If a packet of the paper has been allowed to get at all damp, it will be noticed that the prints on it no longer develop uniformly, but that there are patches which keep persistently lighter than the rest. It is sometimes possible by giving a very full development, to get these patches to catch up the rest; but very often, in most cases in fact, they will not do so, and the print is spoilt. If a packet shows any sign of this, the best thing to do is to take steps as soon as possible to dry the paper thoroughly by heat, and, as soon as it is dry, to enclose it in fresh packing, which itself must of course be thoroughly dry. The ordinary domestic hot-water bottle provides a convenient source of heat without light for the purpose; and half a minute or so on a really hot bottle will be sufficient. The work should be done in a feeble artificial light, of course. A much better plan is to recognise the risk of damage from damp, and to take care that the stock of paper is kept in a dry place. Bromide paper is also susceptible to damp, but as far as our experience goes, not to the same extent; possibly the preliminary wetting before development which is generally given to it, neutralises the presence of the moisture.

Present-Day Printing

A GREAT change has come over the practice of photographic printing with the almost universal adoption of development papers of the gaslight and bromide types, and we fear that the change is not altogether for the better, remarks *The British Journal* editorially. Although it cannot be denied that the best examples leave little if anything to be desired, there is now a large number of prints issued by good establishments which would never have passed muster when albumenised paper, carbon and platinum were the only media available. This state of things is due to a variety of causes, the principal of which is a lack of technical ability and knowledge on the part of the operator. The fashionable photographer of to-day is frequently by way of being an artist, and has entered the profession without the preliminary grounding in darkroom-work and printing which came to his predecessors as a matter of course, and in most cases has to rely upon the work of an assistant whose powers are often limited to producing more or less clean and even prints. In addition to this we have to consider the uneven quality of the negatives which so often exists, consequent upon the practice of postponing development until long after the sitter has departed and the opportunity of correcting any error is past. When wet collodion was the rule, the quality of the negatives was assured, and any that were not up to standard were immediately duplicated. Now we have to rely upon the printer to make good the deficiencies of the operator either by the choice of the most suitable paper, or, as a less satisfactory expedient, the modification by exposure and development of a solitary brand; and printers who can do this successfully are few and far between.

The remedy for this state of affairs lies in the hands of the photographer; he must not expect from an assistant better work than he can do himself, and to this end he must thoroughly master all the printing-



THEIR FIRST BREAKFAST

MAUDE LEE ELDRIDGE

HONORABLE MENTION — DOMESTIC PETS

processes he intends to employ. It is to be presumed that he has a clear idea of the effect he wishes to produce in his finished print and he should be able to produce it or to discover the reason for his failure. Having done this he should instruct his assistants in his methods, and afterwards keep them up to standard. In former days it was a common custom for the principal to commence his day's work, often at an hour when the present-day artist is still in bed, by destroying ruthlessly every print of which he did not approve. This practice made for efficiency, as a printer could hardly expect to retain his position if any appreciable proportion of his work was regularly rejected.

The great variety of printing-papers which are now available enables the photographer to obtain passable results with almost any class of negative, but it must not be forgotten that each has its peculiarities, and that perfect results must not be expected at the first attempt. It is therefore advisable to select two or three brands not necessarily by the same maker and to master them thoroughly. By this method the papers will receive a fair chance and a multiplicity of solutions will be avoided. The slower working varieties have not yet, we believe, been properly appreciated. Their capacity for giving a longer range of tones has been overlooked, as has their power of giving harmonious results from a vigorous class of negatives. In connection with this the strength of light to be used must be carefully considered, as neglect of this may lead to disappointment. Although theoretically a long exposure to a weak light is equivalent to a short exposure with a more powerful one, this is not the case when the light has to pass through a negative. With a dense negative and a slow paper it is impossible to obtain full detail in the highlights before the shadow details are blocked up, and with a rapid paper and a

fairly strong light it is equally impossible to get depth in the shadows before the lights are degraded. When using an ordinary printing-frame this trouble may be overcome by varying the distance from the light, but in printing-boxes, which are now generally used, there is no provision for varying the distance, so that the light must be controlled either by using one or more bulbs as may be necessary or by interposing translucent screens to damp down the light. In some cases a thickness of ordinary white blotting will be found necessary for a thin negative, while the unscreened light is not too strong for a dense one.

We have mentioned these few technical points for the benefit of the operator who has given little thought to his prints, so that he may approach his task with some idea of the problems before him. And to emphasise the fact that the master craftsman must be able to carry his work through to a finish, we must refer to the practice of some of our greatest etchers, who are not content with etching and biting their copper-plates, but laboriously print the impressions sooner than trust them to the most skilled trade-printers. This being necessary with a subject composed mainly of distinct lines, how much more so must it be with the delicate tones of a photographic negative.



Photographic Truth

"ELLA's new photograph must be a jolly good likeness."

"Why?"

"She's had it two days, and hasn't shown it to any one."—*Edinburgh Scotsman.*



SUBJECT FOR NEXT COMPETITION
ADVANCED WORKERS



MIGNON (AIZELIN, SCULPTOR)

S. ALMQUIST

**Advanced Competition—Copying Works of Art
Closes March 31, 1921**

To the uninitiated worker it might appear that it would be no great photographic task to make a picture of a statue, painting or decoration. The successful photographer of still-life subjects might be inclined to assume that copying works of art involves very much the same artistic and technical preparation as is required for still-life photography. Up to a certain point, there is a similarity; but, in the main, there is a distinct difference. The interesting article, "Still-

Life Photography" by William S. Davis, in the last issue, will enable the reader to refresh his memory with regard to the rudiments of still-life photography. It will become apparent that much of the success may be attributed to the composition and lighting of the subject. In short, the worker is in a position to *control* the composition and the lighting. In copying works of art, the camerist is often compelled to submit to rigid rules with regard to when, how and where a certain statue, painting or decoration may be photographed. In some cases, he may be able to remove the subject to a favorable place; but, as a rule, the

worker must make his picture wherever the subject is situated.

The technical equipment required to copy works of art successfully may vary with the purse and photographic experience of the worker. An ordinary hand-camera of moderate price may be used with a portrait-attachment and satisfactory results obtained. On the other hand, a large view-camera with long bellows-extension, high-grade convertible anastigmat, set of ray-filters, electric studio-lamp and other accessories enable the photographer to be virtually independent of conditions. Between these extremes are many excellent outfits that will serve the ambitious worker. An important factor in the successful photography of paintings is the co-ordinated relation between orthochromatic and panchromatic plates and ray-filters. Orthochromatic roll-films, film-packs and cut-films may be used with excellent results. Virtually, every manufacturer of plates and films issues a practical booklet which treats in detail the relationship between plates or films and carefully graduated ray-filters. Some paintings and watercolor-sketches are highly colored and, to retain these beautiful color-values, resort must be had to filters which portray and accentuate the color-values in monochrome.

The more famous the sculptor or painter may be, the more difficult will it be for the worker to obtain permission to copy the subject. Art-museums, libraries, government-departments and private associations permit photographs to be made provided the existing regulations are complied with to the letter. Obviously, priceless collections cannot be thrown open to the camerist without due investigation of the character of the individual and his technical ability to manipulate his equipment without danger of damage to the subject or to the immediate surroundings.

Should the worker be so fortunate as to possess a friend or acquaintance who owns genuine works of art, no doubt ready assent could be obtained to photograph statuary or paintings. Naturally, it may be assumed that many readers of PHOTO-ERA MAGAZINE possess works of art that would make delightful subjects for this competition. Even an excellent plaster-cast of some famous statue will enable the worker to exercise his technical skill. The matter of lighting is one which will prove to be very interesting, especially, with regard to statuary. It is no mean task to retain all the modeling and delicate play of light and shade. However, as in many other PHOTO-ERA Competitions, the more difficult the subject may be the more interest ambitious workers appear to take in it. The more difficult the undertaking seems to be, the more attractive becomes the reward.

Although copying works of art requires intelligent effort, it is not beyond the attainments of the average worker. Several winters ago, a relative presented to me a beautiful watercolor-sketch which I prized highly and subsequently hung in my parlor. One day, another relative heard about the picture and was eager to see it. Unfortunately, this second relative lived at a distance so that it was impossible for him to come to my home. To grant his wish to see the picture, I copied it. When I beheld the finished enlargement, I could scarcely realize that the simple methods I had employed could result in such an attractive copy. Briefly, I removed the picture from the wall, placed it on a chair, focused my camera, used an orthochromatic plate and a three-time ray-filter. I was careful to see that the glass did not reflect light from any source, that the picture was exactly plumb, and that the lens was very nearly focused upon the exact center of the picture so that it covered every part of the pic-

ture. An exposure of several seconds at F/16 near a north window—bright sun outside—completed the making of the copy. The last step was to enlarge the picture to virtually the same size as the original and to mount it attractively. Were a skillful colorist to add the colors of the original, I question whether, at a distance, the average beholder could distinguish the copy from the original. Surely, there are few of my readers who could not do as well or better.

The beautiful example of "Mignon," by S. Almqvist, on the opposite page, shows convincingly what may be done with regard to photographing statuary. However, in making such a photographic copy, the intelligent treatment of light and shade is of far greater importance than in the case of a painting. True, the difficulty to render color-values is obviated; but I am not so sure that the handling of light and shade is not a greater task. Unless the worker is alive to the situation, he will "kill" the beauty of exquisite modeling that the sculptor has labored to produce. A copy of a statue should be almost stereoscopic in effect, and this cannot be obtained without painstaking attention to the lighting. Before making the exposure, the worker should study the subject from every angle and he should also notice with care the relative value of light and shade as they appear on the groundglass.

This competition is being conducted in answer to numerous requests from many parts of the country. Strange as it may seem, the names of professional photographers appear to be greater in number among the requests than those of amateurs. From this fact we are led to believe that PHOTO-ERA MAGAZINE is very far from being a publication devoted exclusively to beginners and amateur camerists. The Editors of this magazine are eager to serve every ambitious photographer, whether he be amateur or professional. It may be well to point out that in few competitions is detailed data of greater importance and we ask each worker to supply complete data in order that we may all learn and profit. Printed data-blanks will be supplied according to rule 4, page 88.

In preparing pictures for this competition, the worker should find no difficulty to obtain the courteous co-operation of officials at art-museums, libraries and other public buildings. A request, supported by the explanation that the camerist is a competitor in a PHOTO-ERA prize-contest, should satisfy the official in charge that the privilege to photograph a statue or painting will not be abused. However, should it be impossible to obtain permission, the camerist had best accept gracefully the situation, and seek another subject elsewhere.

Reference to the letters of those who requested that we conduct this competition, reveals the names of men and women who occupy a high position in the photographic world. I mention this not to discourage but to stimulate every reader to make the most of this opportunity to enjoy a new branch of photography and to profit thereby. It is no more possible to stand still in photography than it is in any part of human life. Either we retrograde or we advance. To stand still, is impossible. Hence, this competition will enable those workers who fear that they are about to retrograde photographically to advance into a new field that is filled with interest. Conservative enthusiasm is the power that makes for permanent success in any undertaking. This form of enthusiasm has been in evidence in these competitions for many months. Let us keep it up and grow together photographically.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than *two* years' practical camera-activity, and whose work submitted here, is *without any practical help from friend or professional expert*. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing *no more than two different subjects*, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. *Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.* Prints on rough or linen-finish surface paper are not suitable for reproduction, and should be accompanied by smooth prints on P.O.P., or developing-paper having the same gradations and detail.

5. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.*

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. *Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.*

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, *stiff* boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition

Closed November 30, 1920

First Prize: Howard P. Hodgman.

Second Prize: George F. Hogan.

Honorable Mention: R. H. Addison; M. J. Burelbach; Charles Harter; Frank W. Snyder.

The Beginner and the "Why"

SOMETIMES, when my attention is called to new, simple methods to obtain results in photography, I am led to wonder what effect this may have upon the beginner. In this day, we are rather given to place too great emphasis upon "get-there-quick" methods. In a sense, the modern amateur is required only to know how to "add-water-and-serve" photographic solutions. I venture to say that a large number of camerists could not, without some preparation, compound any of the popular developers from chemicals in bulk. This situation is not brought about by lack of intelligence but by lack of necessity. It is human nature to avoid unnecessary labor. If I can reduce the preparation of a reliable developer merely to the addition of water to a prepared package of chemicals, I am human enough to do so. It is less bother! However, assuming that I know nothing of photographic chemistry, what does this "add-water-and-serve" method do for me? It does nothing to add to my photographic experience. If I continue to take things for granted and to lack enough initiative to care to know the "why" of what I am doing, then I shall know no more in five years than I do now. Indeed, my photographic experience will be based entirely on an assumption that some one else has taken care to compound the correct quantity of chemicals and my share of the labor is merely to add water, according to directions.

Let us admit that there are many occasions when we are pressed for time, are tired and are not interested in the chemicals that compose our favorite developer. Nevertheless, photography is a science, as well as an art. We would not attempt to build a bridge without knowing something about engineering; nor would we sail very far from land without a practical acquaintance with the science of navigation. Yet, many amateur-photographers using expensive cameras are like men who are out of sight of land without a knowledge of navigation. We say that such men are foolish. Although it may be true that in one case human lives are jeopardised; nevertheless, in the other case, time and much money are wasted to no purpose.

My plea in this short article is for the beginner to find out for himself the "why" of every step that he takes in photography. I am not urging that he should prepare all of his photographic solutions, indefinitely. I would have him do so long enough to make him practically familiar with the fundamental principles. Then, if he chooses to return to the convenient prepared packages of chemicals, very well—he will know *why* he merely adds water and that is more than he knew before.

Should not this knowing the "why" of things apply as well to everything that comes within the photo-

FIRST PRIZE
BEGINNERS' COMPETITION



DANA

HOWARD P. HODGMAN

graphic experience of the beginner? If some one tells him to use stop F/16, instead of F/8, on a certain subject, he should find out why.

Although I may appear to be belittling the efforts that have been made to simplify photography, I have absolutely no such intention. Were it not for simplified photography many thousands of men and women would lack the benefits of a pastime or profession than which few are better or more conducive to the development in them of all that is highest and best. In advocating the knowing of the "why" in photography I do so because my experience has shown me that a man, woman or child gets more out of it, enjoys it, and photography becomes a permanent source of relaxation, health and intellectual benefit.

Often, a beginner may be puzzled by some remark that tends to arouse his interest. Rather than dismiss the matter with a "I guess that's beyond me" shrug off his shoulders, he should make up his mind that no

friend or foe can "put anything over on him" photographically. There must be enthusiasm tempered by common sense in all that we do, and photography is no exception. However, this does not mean that the beginner should take things too seriously. There is a happy medium. A good horse may be depended upon to keep on pulling just so long as he can feel the load give; but when, after repeated attempts the load remains fast the best of horses is apt to lose his spirit. It is much the same with the average beginner in photography. If he feels that he is learning a little bit more and is making a little bit better pictures each time, his interest does not lag and he keeps on.

Many times a closer acquaintance with a person, condition or fact helps to remove prejudices that may have existed. In photography, the more the beginner investigates the "why" of things, the more he will find that he has found a treasure.

A. H. B.



STILL LIFE

GEORGE F. HOGAN

Snap-Exposures on a Tripod

THE rapid aiming of a hand-camera with a fair degree of accuracy is an accomplishment acquired only after some considerable practice, which, doubtless, many otherwise expert photographers know to their cost in the shape of negatives wasted through this cause. In these days of short-focus lenses this is a matter of far greater difficulty than the focusing of the picture. When making photographs of public ceremonies, processions, etc., it is a good plan, if the photographer is not very expert, for him to find some convenient coign of vantage, such as the upper window of some adjacent building. There he can erect the camera upon a tripod, thus making sure of its accurate focus and direction before the time to make the pictures arrives. In this way it is quite easy to make a number of exposures with the advantage that the photographer knows exactly what is included in the picture, leaving him quite free to watch the subject and give it and its most favorable poses his undivided attention. The limitations of the view may be mentally marked by the vertical lines of buildings, etc., though a slight latitude is also allowed by a turn of the instrument upon its tripod-screw to right or left, should the subject move off the predetermined spot. Photographers are so inclined to think of instantaneous photography as inseparable from hand-camera work that they do not realise the value of a tripod.

Prints for Coloring

MOST colorists find some difficulty in obtaining at the same time delicacy and brilliance when working upon the modern developing-papers, says *The British Journal* editorially. If a print is made "light for coloring" it is usually flat, and requires a great deal of work to give a good effect, and a good ordinary print is usually too strong in the shadows for the coloring to be effective. Black-and-white prints are preferred by many colorists, as the whites are generally purer, but the difficulty to obtain a satisfactory rendering, even of brown hair, is great. If prints are toned by the sulphide-method the shadows have a tendency to become blocked up, if the print is at all vigorous, and weaker ones usually tone to a sickly, yellowish brown. Therefore, we recommend a trial of the liver of sulphur-toning, as by this means a delicate image may be toned to a cool brown with little loss of depth, and the shadows remain as transparent as before toning. It is necessary to add that all papers do not behave the same with liver; some will not go beyond a purple printing-out paper tone, and others will give any color between this and warm sepia.

Those Girls

EDITH (showing her photograph): "Horrible, isn't it?"

MARIE: "But a very good likeness."—*Exchange*.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Clearing Autochromes and Fixing After Intensification

WHEN it is necessary to intensify an Autochrome transparency—and it may be said this is almost always beneficial—the process is generally followed by a clearing-bath, composed of a solution of potass permanganate. It is then essential to fix the plate in an ordinary hypo fixing-bath in order to ensure the permanence of the intensified image. In this connection a warning may be given. The plate must be washed quite free of the permanganate-solution used for clearing before it is put into the hypo-bath, for if any of the permanganate-solution remains in the film, the action of the hypo in conjunction with it has a very rapid reducing-action upon the transparency, both in depth and in the brilliancy of the colors. Care must be taken to see that this possibility is avoided, and the plate should be given at least three minutes' washing in a gentle stream of water, in order to remove all trace of the permanganate before it is put into the fixing-bath. This fact was brought to my notice very forcibly recently. Being pressed for time, I was tempted to shorten the washing of the cleared Autochrome which I had intensified, and had placed in the fixing-bath after only a very brief rinse. The result of less than half-a-minute's immersion was that the image was greatly reduced, both in depth, contrast and the brilliancy of the colors, and to such an extent that the deep mauve tint of some asters—the subject was a flower-study—was only just a little off a white, and all the time spent in intensification was thrown away.—R. M. F., in *The British Journal*.

Mountants

MOUNTING is one of the most important parts of a photographer's work, says a writer in *The Amateur Photographer*, and the mountant is the most important factor in mounting. Home-made mountants may be quite as satisfactory as some of the proprietary articles, and these notes have been penned for the benefit of those amateurs who wish to have a choice of formulae when making up a mountant.

Briefly, a mountant should (1) be pure, this presupposing neither acidity nor alkalinity; (2) contain as little moisture as possible; (3) be permanent, *i.e.*, not liable to chemical change for a considerable period.

A number of formulae for mountants which fulfil the requirements detailed above in a greater or less degree are given.

A.—The most widely used mountant of any perhaps is starch-paste. A teaspoonful of crushed starch is placed in a cup and ground to a powder. Three spoonfuls of cold water are then added and the whole worked to the consistency of thick cream, there being no lumps. Absolutely boiling water is added and the mixture stirred. On stirring, it will jellyfy: if it does not, it must be boiled, cooled, and the skin on the surface removed. The paste should be used cold, and when made, as it will not keep. The chief objection to this mountant is that it contains much water, and the result is that the mount buckles on drying.

This difficulty of buckling may be overcome to a certain extent by pasting on the back of the mount a

piece of paper exactly similar to the print. The two pull against each other in drying, and the result is a flat mount.

B.—Gelatine	2 ounces
Water	12 ounces
Chloral hydrate.....	2 ounces

The gelatine is dissolved in the water by gentle heat, the chloral hydrate added, and the whole allowed to stand for a time. The adhesive is then made neutral by the addition of a sufficient quantity of sodium or potassium-carbonate solution. Caustic soda or caustic potash would answer equally well. This formula again contains much water, and is not too satisfactory for that reason.

C.—Dextrine, best	3 ounces
Water.....	5 ounces
Oil of cloves.....	3 to 5 drops

The water is put in a vessel on a water-bath and kept at 160° F., and the dextrine slowly stirred in until all is dissolved. The oil of cloves is added, stirring all the time, and the mixture allowed to cool. When cold it is poured into a bottle, corked, and set aside in a cool place for about ten days, when it will have congealed into a firm white paste. This keeps well and is less likely to cause cockling than some others.

D.—Shellac (unbleached).....	2 ounces
Methylated spirits	quantity sufficient

The shellac is dissolved in the spirit—pure alcohol is better—to form a fairly thick fluid—the consistency of London cream. The fluid is thinly applied both to print and mount, and the two pressed quickly into contact. This mountant causes no cockling, and will keep indefinitely in a well-stoppered bottle, though the spirit will tend to evaporate in time.

E.—Pure gelatine.....	1 ounce
Water.....	4 ounces
Methylated spirit.....	1½ ounce
Glycerine.....	¼ ounce

The gelatine is softened in the water and then liquefied by gentle heat. The spirit and glycerine are then added, a little at a time, with brisk stirring. This mountant is used hot, the mode of procedure being as follows. A piece of glass, slightly bigger than the print, is warmed to the temperature of the mountant, which is brushed thinly over it. The print is then pressed down on this glass face upwards, and, after having been in close contact all over, is transferred to the mount.



A Blurred Picture of the Castle of Chillon

"My dear, you should travel," said a lady of the G. R. Q. variety to her friend; "it so enlarges the mind, gives one something to talk about and tell to one's friends. I shall never forget how my camera shook as I sobbed when taking a picture of that dreadful prison at Chillon, in which dear Lord Byron languished those many weary years." (With apologies to the *Morning-Post*.)



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

As an animated record of what one might see take place on the ice of a winter's afternoon, I should consider this picture very complete and a decided success with two exceptions. First, why are the skaters skating uphill? Second, in a record we should not have to guess whether or not the lady-spectator at the extreme left is armless.

But why use this picture as an imperfect record, when so much is contained therein of Pictorial Value?

As far as art is concerned the action is well rendered. Good values and atmospheric qualities are excellent and the general softness is pleasing. To bring Art to the front, however, trimming will have to be resorted

to, to eliminate distraction, introduce harmony and unity, conform with the laws of balance, as well as to straighten up the picture.

Beginning at the left, let us remove a strip $1\frac{1}{4}$ inches at the top to $1\frac{3}{8}$ inches at the bottom. Thus, by one stroke, we have removed from the former valuable picture-space our awkward sister, likewise we have dispensed with the armless lady, the one-legged skater and the two at the far bank in seeming horse-play—all objects of distraction.

We will next square-up the picture to this line and then remove $\frac{3}{8}$ of an inch more from the foreground.

Now, as we view the new picture, our attention is arrested by a real skater in good relation with the other figures in the picture, and the deepest shadow of the snow-bank is now in the lower left-hand corner which puts the whole in good balance, and the effect is extremely pleasing.

FREDERICK CHARAVAY.



THE PICTURE CRITICISED THIS MONTH

THE winter-sport scene presented, though in itself interesting, has no center of interest. This seems to me its greatest fault. The attention is claimed by, and scattered among, the diverse groups, and the center of the picture, where the interest should be focused, is occupied by a stretch of empty, white ice. This space might have been filled to advantage by a single performer, perhaps in a figure-eight, if he were available.

The foreground of the picture with its mounds of snow and resulting shadows is very pleasing. The upper part of the background is somewhat too blurred, so that the effect of a woods, begun by the tree-trunks, which are distinct enough, is lost as one glances up. If one looks closely enough, there is in the near background the outline of a bridge, but it is not clear enough to be more than a suggestion, and so loses its potentiality to add interest to the picture as a whole.

Y. BILLY RUBIN.



MR. RODGERS claims that his print is only a record. Let's see how it measures up along this line. There is soot and whitewash on account of underexposure, 1/25 second would have been nearer correct. The appearance of the skaters going uphill could have been avoided by holding the camera level. The entrance to picture is blocked by the banked snow. The lines of snow, edge of stream, and hilltop are parallel. Many of the skaters are going right out of the picture. All of these faults could have been avoided by change of viewpoint. The latitude of Canada will hardly justify speed-work late in the day, even in bright sunlight and at F 45, especially when the subjects are crossing directly parallel to lens.

J. E. CROSON.

So Mr. Rodgers admits that his picture is merely a record of an animated scene. Well, modesty is becoming; but I differ with him, and maintain that, whether he intended it so or not, it is more than that.

It is an excellent rendering of snow; the shadows in the foreground are delightful; the strip occupied by the skaters is flat, and, as it should do, it looks flat. The wood in the background forms an appropriate setting.

And, best of all, the movement of the figures is excellently suggested. Someone may plead lack of concentrated interest. Interest concentrates itself, to my notion, in the youngster with the "shimmy" club. Anyhow, the composition is decorative rather than pictorial, and if this criticism holds here, it would be equally true of the Frieze of the Acropolis.

More detail might be desired in the figures, but rapid motion precluded longer exposure.

BERT LEACH.



By common consent the artist is allowed great liberties in the composition of his pictures in the way of grouping and arranging elements. But there are some limitations to poetic and pictorial license. The robust common sense of mankind forbids, for example, violation of well-known physical laws of the material world.

Water at rest, whether frozen or not, always assumes a level position.

If the reader will take the trouble to measure with a quadrant, he will find that the surface of the water in this picture is represented as inclined at an angle of about ten degrees from the horizontal.

E. L. C. MORSE.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



THE frontispiece, in this issue, is one of the few original positions of a violinist pictured by the camera that have come to my attention. This magazine has published two others during the last few years, the most striking of which appeared as the frontispiece of the January issue, 1918. Violin-virtuosos generally strive for something unconventional when posing for a picture to be used for publicity-purposes, but rarely succeed. They try to avoid the natural, but hackneyed, position (side-view) of playing the instrument—the bow in position for playing; in position at the middle of bow, or bow held at full length.

The photographer who can produce an attitude of the virtuoso holding his beloved violin with one hand (the left) and the bow in the other, that shall be at once professional, original and artistic, will gain the musician's everlasting favor. The old violinist, pictured by Mr. Conyers, is tuning his instrument—a quite common practice—but almost unconsciously assumes a pose that yields a delightful and harmonious composition. It will be noticed that there is no object in the lower half of the picture to distract the eye. It is all in an appropriately low tone, unadorned, subordinated, forming a substantial base for the upper part of the figure.

The only Saunders that has contributed to PHOTO-ERA pages is the artist of the engaging juvenile genre, page 60. Mr. Saunders specialises in this class of work and has achieved numerous successes, many of which are familiar to PHOTO-ERA readers. He is a frequent participant in our monthly competitions; and whether he wins a prize or an Honorable Mention, he is always good-natured and imperturbable. The light-haired child blowing soap-bubbles, with the cup of liquid supply close at hand, and standing amidst an appropriate setting, offers a picture at once simple, artistic and interesting. The values are good and the planes clearly indicated.

The scenes that illustrate Herbert B. Turner's visit to Algeria, pages 62 to 70, are replete with historic and artistic interest. In some cases, Mr. Turner's only aim was to secure a valuable record, and pictorial composition was not in his mind, although the viewpoint rarely gave him trouble. If any one pleasantly suggested that the Arab at Bou-Saada and the other at El Kantara, occupied the exact center of the picture-space, he would acknowledge the impeachment by replying, "My error!" and explain how easily the dark-skinned individual could have been induced to pause or stand a little to the right. But Mr. Turner confesses that he is not an accomplished linguist and that photographing in Arabian countries presents certain difficulties, to overcome which, faculties, diplomatic rather than artistic, assert themselves. But his pictures possess such charming qualities, and, technically, are so far superior to those that accompany the travel-talks of professional lecturers, that the reader is more likely to enjoy than to criticise them. Data will be found in the text.

Among the master-photographers who have been held captive by the scenic charms of Switzerland are those whose work is familiar to the readers of this magazine—G. R. Ballance and Will Cadby. The former has spent several years of constant camera-activity

mostly in the Eastern part (the Engadine); whereas the other passes his winter-vacation in the Bernese Oberland of the picturesque country of the Swiss. Both artists embellish the pages of this, the February issue.

The dilapidated church at Celerina (near St. Moritz), in its winter dress and snow-clad surroundings, presents a magnificent spectacle. With what rare artistic judgment has Mr. Ballance produced so well-ordered a winter-scene! It is unique among the thousands of his photographs of Swiss scenery that it has been my privilege to see. It is an inspiring object-lesson in pictorial composition, and will doubtless be admired by every reader of this fortunate issue. Although no data are available, it may be stated that Mr. Ballance's apparatus and materials, as used in his work in Switzerland, have been uniform in character, viz., 5 x 7 camera; 8 1/4-inch Goerz Dagor; Ilford Iso plate; pyro-soda developer and Platinotype C. C. paper.

Individuality based on deep convictions marks the artistic impressions of Edward R. Dickson, pages 75, 78, 79, that illustrate his argument in favor of his pet theory expressed in a very interesting manner.

A more delightful story of winter-sports for children, as portrayed by the camera, by Will Cadby, can scarcely be imagined. The attending pictures, pages 80 to 84, are a part of Mr. Cadby's engaging narrative. They also serve to familiarise the photographic newcomer with the camera-sport among snow-clad mountains or hills, whichever are accessible to him. Mr. Cadby is clearly a versatile photographer, being equally eminent in portraiture, summer- and winter-landscape, and juvenile genres.

Advanced Workers' Competition

In comparing the merits of the three prize-winning pictures of the "Domestic Pets" competition, most readers will take issue with the PHOTO-ERA jury. Most of them undoubtedly will wonder why the first prize was not awarded to the highly successful and captivating group of new-born chicks, by Maude Lee Eldridge, page 91. Although "Their First Breakfast" is a masterpiece of pictorial composition and technical workmanship, and, in this respect, the finest thing our talented contributor has ever sent to our competitions, it is thematically a little trite. Originality of subject consistent with technical excellence is given the preference by our jury, hard though it is sometimes to make such a decision. "Fighting Tom," therefore, captured the highest honor. He enlivens page 89. It may interest the reader to know how this particular feline came to be photographed. I quote from the artist's letter. "'Fighting Tom' is this cat's name, for since he was a kitten he would rather fight than eat. He is now ten years old. This is how he came to have his picture made. As I was cleaning my Graflex, the neighbor's new bull-dog came through the back-gate and 'Fighting Tom,' raising his back, went out on the porch to greet him. Having but recently read your advance-notice of the November-competition, I got busy and you are the judge of the

result. When the shutter was released, 'Tom' took it as a signal and then the fur began to fly! The background in the negative was composed of lattice-work and looked horrible on the first print. Although I never had any experience in retouching, I removed this unsightly background, and here is my first attempt in that line." Other data: 10th of November, 4.30 P.M.; bright light; 4 x 5 Auto Graflex; B. & L. Tessar F/4.5; used wide open; Seed 60; pyro, in tank; print on Artura Iris "C."

Mr. Smith must have acted with celerity and excellent judgment, for his model is well placed, well lighted and in good focus. It is altogether a creditable piece of work.

The novelty of "Dinner-Time," page 90, is obvious. Instead of picturing this common episode out in the open, as is usually done, Mr. Hodges reversed the order. He thus obtained an original setting—the entrance to the shed, which is flooded with sunlight, with an attractive landscape for a background. The against-the-sunlight effect is admirable, the chickens' friend being not only well placed, but effectively illuminated. The ensemble evinces the camerist's artistic perception and requisite executive ability. Data: Noon-hour, early fall; bright sun; 3 A Kodak; Kodak Anastigmat; stop, F/16; 1/50 second; film; M. Q.; part of film enlarged on Eastman Bromide paper toned with Cyko Re-Developer.

Mrs. Eldridge's irresistible chicks enjoying their first breakfast since emerging from the shell has already been referred to in terms of high praise. A more felicitous arrangement of these little yellow creatures has not graced the pages of this magazine. A better exemplification of balance in pictorial composition it were hard to imagine, while the technical treatment is admirable in the extreme. Data: May (in California); good light; 5 x 7 Century Camera; Voigtlander lens at F/8; 1/25 second; 4 x 5 Ortho Plate; M. Q.; Iris contact print.

Example of Interpretation

COPYING Works of Art (paintings or statuary) is the subject for the competition that closes March 31, 1921. The Photography of statuary—bronze, marble or plaster—has been treated very ably by W. W. Klenke in PHOTO-ERA MAGAZINE for April, 1913 and, forming the subject of a very successful competition (see PHOTO-ERA MAGAZINE 1911), is an activity that merits more attention from photographers than it has received in the past. Besides being a source of much satisfaction and potential profit, this work is a wonderful preparation for lighting and modeling in portraiture, and forms a special, important course in European schools of photography. A remarkably successful example of statuary-photography is "Mignon," by S. Almqvist, of Helsingborg, Sweden, page 92. Not only is the eye attracted to the beautiful play of light and shade—no dazzling highlights or opaque shadows, but a full scale of quotations—but it is held captive by the beautiful figure of a young girl, in an attitude of graceful repose. Mignon—as every one familiar with German literature knows—was an Italian maiden in Goethe's "Wilhelm Meister's Apprenticeship," represented as petite figure and incomprehensible, yet beautiful and full of sensibility, and secretly in love with Wilhelm, her protector, who feels for her nothing but kindness and compassion. She at last becomes insane and dies, the victim of her hopeless attachment. Aizelin, a French sculptor, is the author of this exquisite marble statue.

Beginners' Competition

DESPITE the apparently distorted perspective of the head, hands, and feet the picture of the happy little fellow, "Dana," page 95, has much to commend it. The position assumed by the model, the illumination (in full sunlight), and the tone-values are worthy of high commendation. Somewhat remarkable, too, is the circumstance that the young camerist has been a camera-user for only one year, and, as is required of every contributor in both classes of PHOTO-ERA MAGAZINE competitions, Mr. Hodgman has had no assistance in his photographic work. Data: New Hampshire, June, 6 P.M.; sunlight; Goerz Syntor Anastigmat, F/6.8, 6½-inch focus; stop, U. S. 2.9; 1/6 second; Eastman Autographic Film; pyro; Cyko contact-print.

I have heard frequently the remark that a still-life was an easy thing to do; but after having seen the overloaded, bewildering attempts by professional painters, and then studied the simple and truly artistic effects in this line produced by such masters as Decker, Bradford and Davis, the student will agree that the task requires much ability and experience. Mr. Davis' article on this subject, in a recent issue of this magazine, was very illuminating and helpful.

Mr. Hogan's essay, page 96, is fairly consistent, in that he has assembled objects that are at least edible. The law is so strict, that I dare not hazard a reference to the object with the long, slender neck! Had Mr. Hogan profited by the many articles and pictures bearing on the subject of still-life that have appeared in PHOTO-ERA MAGAZINE during the past ten years—and quite recently, too—he might have bestowed more care in arranging and lighting the objects in his present still-life. The glass-dish with fruit would not seem to call for a loaf of bread, or a large and inappropriate bottle, as a companion. It depends upon the character of the group to be composed and its purpose. Though the objects be still, they should be understood and admired, or, if fruit, to be eaten. In the latter case, a couple of knives would form suitable adjuncts. Perhaps a glass containing a lawful liquid might serve as companion and provide the necessary balance for the picture. In the present instance, the artistic touch is absent and, while the group on the table is devoid of merit (except the intent), the background is unnecessarily loud, distracting and top-heavy. Data: November, 2.30 P.M.; bright sun; Hicco Camera 3¼ x 5¼; 6½-inch rapid symmetrical lens; stop, F/8; one second; Premo film pack, Premo tank-powder; Azo Grade E. Hard X; subject two feet from window.

Our Contributing Critics

THE picture presented this month for the consideration of our assistant critics is offered gladly by Mr. M. A. Coulson, a professional photographer in Canada. The unusual character of the subject should stimulate the interest and arouse the readers of PHOTO-ERA to well-considered and constructive criticism. Data: August, 11 A.M.; hazy sun; 5 x 7 Premo No. 9; Tessar lens; stop, F/8; Seed 30; pyro for plate; Nipera solution for paper; Azo Hard X. F.

Did Her Little Best

"DOROTHY, dear, I hope when you took back the photo-album that you thanked Mrs. Naylor for lending it to you."

"There was nobody home, mamma, but the door was open, so I went in and put the photo-album on the table and said 'Thank you, an' comed away.'"

—Boston Transcript.



ON THE GROUNDGLASS

WILFRED A. FRENCH



An Alleged Camera-Feat

TO PHOTO-ERA readers, in general, I would say that the incident which I described in the first paragraph of the "Groundglass-Department," in December, had no special significance, although, to be sure, my manner of making the picture may not have been stated with sufficient clearness. Doubling the exposure—according to the contingency that may arise—is a common practice among experienced camerists; and yet several readers doubted my story and declared the feat to have been impossible! Well; if they supposed that I held the camera in my hand during each of the two exposures (1/50 second), they were justified to be skeptical, although the thing could be accomplished successfully, provided that the image in the viewfinder were located exactly the same, each time. But that could not be expected by holding the camera in the hand; obviously not. What I did, was to attach the camera to the tripod. Voilà! But this was not all. The tripod was an old, light aluminum one; it had lain in the automobile for over a year, and was not strong or steady. The camera (a 5 x 7 Cartridge Kodak) had to rest on its side, which is rather narrow, because I was making a horizontal picture. The tripod-legs rested among some bushes, so that the entire operation was not attended without some difficulty. In the circumstances—also because the picture was technically, at least, successful—the camerist may be entitled to a wee bit of credit.

Messing Up the Kitchen

MRS. AIKEN went to pass the evening at her club over which she presided, while Mr. Aiken was supposed to be playing billiards at his club. On her return home Mrs. Aiken entered the kitchen, only to find it terribly "messed up"—utensils strewn about, little pools of fluids on the floor, the sink stained, and her husband with hands and clothes soiled, standing amidst this confusion. "At it again!" wrathfully exclaimed Mrs. Aiken. "Didn't you promise me never again to use the kitchen for your dirty camera-work?" "Sh! my dear," exclaimed Mr. Aiken, "it isn't photography at all. It's home-brew I've been making."

Reading a Photo-Magazine

AMONG the many new subscriptions that came to this office during January were some of a humorous nature. Here is one:

"Dear Editor: I have recently taken up the sport of photography. Hence I joined the local camera club. One of the benefits is to be able to read the photographic journals. A friend sent me a copy of PHOTO-ERA MAGAZINE, saying it was the best. I compared it with others at the camera club, and found that my friend told the truth. In fact, many at the club think so, too. The regular monthly copy is read there by many. To read it, meant for me to leave the house for the club, three miles away. I waited my turn with two members ahead of me. No use. I did other things and then returned home, with PHOTO-ERA MAGAZINE unread. Cost me ten cents carfare. Next evening I

tried the Public Library. Same result, only more in line (seated). Another ten cents and an evening gone! Try the club again? Nothing doing! I figured out the time, carfare and probable disappointment—so here's money-order for \$2.50 (one year's subscription, 1921) for what in my opinion, is the best photo-magazine in existence. The additional M. O. for \$2.50 is for the twelve issues of 1920. If you cannot supply them, please return this M. O. With hearty good wishes for the Magazine and its able Editors,"

PHILIP A. ARMSTRONG.

Anent the Moon

As I have noted several times in the past, the moon is an important feature in pictorial photography, and is frequently an object of interest to landscape-photographers. Many of them have studied the moon from an astronomical viewpoint, and are very well informed regarding its character, illumination, phases, etc. Imagine my amazement, when I read in the department of "Questions and Answers" of a prominent American newspaper the following reply by its editor to a very simple question. The question was:

"Why isn't the moon always round?"

Ans. "The moon is always round, but it's (its) changes in appearance are due to the earth's shadow being thrown upon it as the earth passes between the sun and the moon. The size of the shadow varies each night that the moon is visible."

If the director of that department had consulted a book on astronomy, he would know that the moon receives its light directly from the sun. Viewing the moon as we do, from quite a different direction, we observe the illuminated part and, at the same time, the shadowed part. The former increases and the latter decreases, from day to day, as we see the moon from the day that it first appears as a thin crescent in the western sky, the horns pointing away from the source of illumination. The earth has nothing to do with these changes on the moon's surface. *It is only during a lunar eclipse that the earth's shadow falls upon the moon.* And yet there are many persons who believe that our nocturnal luminary receives its bright and beautiful light from the earth!

What Did She Mean?

ALTHOUGH I have pleaded many times for the dignity of our beloved art, such terms of self-reproach as "camera-fiend" and "rank amateur" should be relegated to the realm of barbarism. Still, an occasional nuisance including the tabooed epithets—like the one following—is not without a degree of refreshing humor: "Dear Editor—Please give me your opinion of the enclosed prints. I am only a rank amateur and photographer for my own amazement."

A. H. T.

Result of the H. C. L.

"I WANT ten cents' worth of hypo."

"What do you want it for?"

"A nickel."



ANSWERS TO QUERIES



S. S. D.—Kodolon is an excellent developing-agent if made up according to formula. It is exceedingly sensitive to bromide, however, and if a blue-black print is desired, only about a fourth of the amount of bromide called for in the formula should be used.

G. C. K.—Color-prints can now be made by strictly photographic processes. The print—strictly speaking—is not on paper, but is composed of transparent films with a white-paper backing. The Hess-Ives process is quite simple but still rather expensive. The Hiblock is exposed in the camera as one plate. It is, however, composed of two plates and a film, which are separated after exposure and developed separately. Prints of each are then made on specially prepared film developed in hot water, and each one dyed a separate color—one yellow, one magenta and one blue. When dry, the three are superimposed in register and with a white-paper backing. They constitute together the Hierome "print."

K. B. C.—Old-negative glass is quite in demand now, and good prices will be paid by the Eastman Kodak Co., of Rochester, N.Y., or by Geo. W. Cary, 2968A Cleveland Avenue, St. Louis, Mo. Packing-directions will be sent by these concerns. The Eastman Kodak Co. also furnishes shipping-tags for the boxes. Not more than 100 pounds should be packed in one box, and all plates should face in the same direction.

F. H.—Stereo-cameras made in the United States may be obtained from Fohner & Schwing and The Rochester Optical Co., Divisions of the Eastman Kodak Co., Rochester, N.Y.; also from Burke & James, Inc. If you are interested in the new, small, imported Stereo-cameras, you can obtain information from Harold M. Bennett, 110 East 23d Street, New York City, C. P. Goerz American Optical Co., 317 East 34th Street, and R. J. Fitzsimons, 75 Fifth Avenue, New York City. There are many excellent cameras to be had with lens- and shutter-equipments adapted to all requirements of the stereo-photography. First obtain all available descriptive matter and then decide which instrument will serve your requirements best.

R. A.—Inaccurate shutter-speeds, due to dust in pneumatic valve, may be corrected by having the cylinders re-buffed. This work should be entrusted only to an expert. In no circumstances should oil or grease be used. Any firm of acknowledged reliability can attend to the cleaning of your shutter, and will guarantee entire satisfaction.

J. O.—Whether tank- or tray-developing is the best depends, for a decision, on individual taste and requirements. One camerist may find tank-developing both efficient and convenient, and another may find greater pleasure and profit in darkroom-developing. However, the fact remains that tank-developing of plates and films is no longer considered to be experimental. Amateur and professional photographers have put the stamp of their approval on tank-developing. Autochrome and Paget plates are still developed by hand in the darkroom. The developing of these plates—or any plates and films used to obtain scientific data—requires constant attention during the entire developing-process, and they cannot be developed successfully in a tank, for the reason stated. For the average amateur, who is not interested

particularly in the chemistry of photography, the tank is unquestionably the most convenient and efficient method to develop vacation- and snapshot-pictures.

H. C. K.—For snapshot-work in city-streets on bright days the shutter should be set at $1/50$ of a second, the stop at $F/16$ and the focusing-indicator at twenty-five feet. This combination of shutter-speed, stop and focus will meet all ordinary requirements of the camerist equipped with a hand-camera. Virtually, any hand-camera—thus set—becomes equivalent to a fixed-focus box-form camera, and is eminently suited to genre-photography in city-streets.

W. J. R.—Films may be used after expiration-date, but successful results cannot be guaranteed. However, if the film has been kept in a cool, dry place, and it is not too long after the expiration-date, you should obtain fairly satisfactory results. Do not use such a film to photograph any subject which cannot be duplicated readily. Such a film is an ideal one with which to experiment, and its use for this purpose is preferable for any serious work.

S. B. A.—The advantage of a reflecting-camera lies in the fact that the image of the subject appears on the groundglass right-side up until the shutter is released. No focusing-cloth or tripod is required to compose each picture properly and to the best advantage. There are many excellent reflecting-cameras now on the market. Some foreign instruments fold into small compass and may be carried as easily as a small hand-camera. Most reflecting-cameras are equipped with focal-plane shutters and are used extensively to make speed-pictures. However, these cameras are equally well-adapted to all forms of amateur and professional photography. Owing to the remarkable efficiency of the focal-plane shutter, the use of an anastigmat lens is virtually required to obtain satisfactory results. All reflecting-cameras are listed with high-grade lens-equipments. The selection of the lens depends on speed, focus and cost, and rests entirely with the individual camerist and his requirements.

K. Y.—One way to mount pictures with paste is to obtain a large piece of plate-glass, collect the prints from the wash-water and place them face down on the glass—one on top of the other. Then apply the paste to the topmost print with a large brush—being careful to cover all corners thoroughly—lift the print from the pile and mount it. Continue to do this until the last print is reached. If the pile is not moved the paste will not reach the picture-side of the prints.

O. C. M.—Horizontal scratches on roll-film negatives are sometimes caused by trying to twist the paper more tightly around the spool after removing it from the camera. If, in addition, small particles of emulsion become loosened during the operation of twisting, they are apt to tear long, deep gashes in the celluloid base of the film. Such abrasions cannot be removed satisfactorily by retouching. Whenever possible, use a roll-film camera that is equipped with some form of tension spool-holder. This device prevents the film from unrolling faster than the winding-key is turned. In any event, it is far better to wrap up a loosely wound roll in heavy manilla paper than to try to twist the black paper more tightly around the film. Attention to this matter is of the greatest importance.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication



Ownership of Photo-Era Magazine

To aspire, to achieve and to maintain a high standard of performance in any profession is laudable. If the aspirant succeeds, he is worthy the approbation of his fellow-men. The Publisher of PHOTO-ERA MAGAZINE feels that he belongs to this fortunate class of individuals. If it be true that he has raised this publication—acquired in 1907—to one of creditable excellence, standing and influence, the fact must be attributed to the pursuance of a policy founded on the highest business-principles applied to every department of the publication. That this policy has been marked by constant vigilance, painstaking effort and personal sacrifice, also unstinted devotion to the interests of subscribers and advertisers, is evidenced by the universal esteem and material support that have been accorded the publication during the past years.

When, during the period of the World War, publishers of many magazines and newspapers—because of the greatly increased cost of production—lowered their standards of technical excellence—when they could have well afforded to maintain it—the quality, of PHOTO-ERA MAGAZINE, in its every department was not allowed to deteriorate. Its Publisher felt that he owed a duty to his subscribers and advertisers, be the increased cost of production what it may, and he did not hesitate to meet the exigencies of the situation. This resulted in the receipt of letters of praise, congratulation and encouragement from all sides and—a greatly increased number of subscriptions and advertisements. Is life worth living? The Publisher replies emphatically in the affirmative. It is a privilege and delight to serve so diverse, artistic and exalted a profession and pastime as photography.

Now, to the point. Unremitting effort does not differ from constant dropping that wears away the stone, and thus thirteen years of constant mental activity have begun to tell on the Publisher of this magazine, who has now relinquished the business and placed it in the hands of his efficient and deserving coworker, Mr. A. H. Beardsley.

With the publication of the January issue, 1921, therefore, Mr. Beardsley has assumed the good-will, rights, titles and privileges, as well as the financial responsibilities, of PHOTO-ERA MAGAZINE, which will be published henceforth in his home-town, Wolfeboro, New Hampshire. Mr. Wilfred A. French will continue as Managing Editor, and Manager of the Boston office, at 367 Boylston Street, directing and continuing the policies that have made the magazine creditably known in all parts of the photographic world. He will be in daily touch with the office of publication, at Wolfeboro. This change from Massachusetts to New Hampshire will greatly reduce the cost of production and running expenses, at the same time providing excellent transportation-service. These economic advantages have been appreciated by other publications, such as *Asia*, *Century Magazine* and *Atlantic Monthly*, which are now being printed and issued in New Hampshire. Wolfeboro, the terminal of a direct railway-line from Boston, is favorably situated on Lake Winnepesaukee, celebrated as a summer- and winter-resort, and a mecca of photographers.

In conclusion, the former Publisher may be pardoned for repeating that when he took over the magazine, in 1907, it had become a mismanaged and discredited enterprise although possessing splendid possibilities, whereas it now is a going and prosperous business.

WILFRED A. FRENCH.

Boston, February 1, 1921.



Notice

NOTICE is hereby given that I have sold to Alonzo H. Beardsley, the business of publishing the PHOTO-ERA MAGAZINE, The American Journal of Photography, which I have carried on under the name of PHOTO-ERA, The American Journal of Photography, and I have now no financial responsibility in connection with the said business.

WILFRED A. FRENCH.

February 1, 1921.



Notice

AFTER purchasing the business of the PHOTO-ERA MAGAZINE, The American Journal of Photography, I shall carry it on under the same name. I am responsible for all accounts of said business.

ALONZO H. BEARDSLEY.

February 1, 1921.



Christmas-Gifts and New-Year Greetings

At no time, in the history of this publication, have the Editors received so many letters of congratulation, good wishes and encouragement, than during the past holiday-season. Not only did they receive these missives in the form of artistic cards, but of personally-made calendars of appropriate photo-pictorial design; also in the form of gifts of intrinsic value, such as "Eversharp" silver-pencils, boxes of cigars, boxes of candy, books, and framed pictures.

It would take a long time—although it certainly is worth all the time in the world—to answer these many communications individually, and other acts of friendship and good-will. So we take this means to express, to one and all, our sincere thanks and gratitude, and shall continue our efforts in order to merit the permanent approval and satisfaction of our subscribers and advertisers. We wish them all the joy and happiness that this year will bring forth. This is, above all years, a year that marks the retirement of an Administration with its many faults, and while it may have shown a few symptoms of true American, yet it has meant destruction to many of our industries, our national pride and influence.

But we certainly have much to be thankful for, and sincerely hope that through the coming Administration, many of the evils that have been created during the past eight years may be eliminated, and that much general and lasting good may result.

THE picture of the Santa Barbara Mission, which gained for Mr. E. M. Pratt the first prize in the "Architectural Subjects" competition, was produced with a soft-focus lens at stop F/55. Inasmuch as photo-pictorialists generally do not use stops smaller than F/11, this item in the data, printed in "Our Illustrations" in connection with Mr. Pratt's picture, has been questioned by several readers who write us expressing their astonishment. Some of them believe it to be a typographical error and that stop F/5.5 was intended.

For the benefit of these and other doubting readers, it may be stated that Mr. Pratt actually used this small-sized stop; because with the soft-focus lens that he used, he would have been unable to obtain the clear definition that marked his picture, which was published in our January issue.

Another Useful Activity for the Camerist

ONE day last month, the boiler of our six-story office-building suddenly ceased to function. When our neighbor, Mr. Lowell F. Clapp, Manager of Otis Clapp & Son, the well-known pharmaceutical chemists, heard that the office of PHOTO-ERA MAGAZINE had been suddenly deprived of all heat, Mr. Clapp, a talented amateur photographer and enthusiastic reader of PHOTO-ERA MAGAZINE, immediately offered the Editor and his staff comfortable quarters in his own large building, which were enjoyed for a whole day, while the striking boiler was being repaired.

This act of hospitality was very much appreciated, and might be added to the already long list of useful activities, in his community, on the part of the camerist, although the recent experience of the PHOTO-ERA Editorial staff is not likely to be duplicated elsewhere.

A Lens-Talk

MR. WALTER G. WOLFE, director of the photo-optical department of the Pinkham & Smith Company, Boston, Mass., gave an interesting talk on photographic lenses before the Camera Club of New York, January 17, 1921. Mr. Wolfe is the designer of the various lens-systems made and sold by the Pinkham & Smith Company, including the following well-known types: the original "Smith" single and double Semi-Achromatic lenses, the Visual Quality and the new Synthetic. The talk was much enjoyed by a large audience, composed of members and their friends.

The Fate of a Circulating Collection of Prints

A GOOD story, at the expense of L. A. H., a well-known amateur-photographer, was told recently at a meeting held by a few old members of a once popular print-exchange club, to which Mr. H. belonged. The incident happened about twenty years ago. Mr. H. had returned from one of his many extended and productive camera-tours in Europe, and, with his usual industry, made prints from his new and extremely interesting collection of negatives—genres, street-scenes and landscapes. He consequently prepared a beautiful set of one hundred prints which, with characteristic enterprise, he started on the circuit of the print-exchange. This itinerant collection of prints was eventually to come back to him. The active membership of the club at that time was seventy-five, to none of whom the number of prints was mentioned. Recipient

No. 1, knowing Mr. H.'s generosity in preparing and giving away lantern-slides and prints, retained one of the prints, promising to himself, that, at some convenient future time, he would explain to Mr. H. the reason of the petit larceny, ask forgiveness, else return the print. Thus the collection, minus one print, reached No. 2 on the list, who, also admiring the artistic beauty of the pictures, was actuated by similarly sinful motives and—kept one print, believing, like his predecessor, that just this one print would not be missed. Recipient No. 3, another ardent lover of pictorial beauty, struggled violently against the temptation, but, alas! succumbed. And thus the collection, numbering ninety-seven prints, was forwarded to the member next on the list.

To make a long story short, each recipient, in turn, was tempted and, like his ancestor in the Garden of Eden, fell most ingloriously. When, at last, the collection reached the source of origin, it numbered twenty-five prints! Mr. H. was indignant. Moreover, he was unable to identify the guilty ones, unless, indeed—he concluded—one member had appropriated seventy-five prints at one fell swoop! *Que faire?*

He sat down and reflected. Then he wrote to every member on the list, asking how many, if any, prints he had retained. The reply came back from each: "ONE!" To ask each member for the return of *one print*, seemed small to Mr. H.,—who, by the way, is a man of wealth—so he philosophically pocketed the loss. He never seriously regretted this decision. As a matter of fact, he looked upon these seventy-five successive pilferings as a sincere compliment. At the same time, he decided never again to send a set of valuable prints on a similar mission.

"My Photographer—My Broker"

Editor of Photo-Era Magazine:

Acting upon the suggestion of the man who wrote the article that appeared in PHOTO-ERA several months ago, "My Photographer," and upon the advice given by you with regard to safe investments, I added to my already large list of favorite supply-people, a stock-broker. He treated me so well, that he is now "my broker." I am one of those that got caught in oil-deals and nearly all my savings were eaten up.

That was last summer, and I had not read my copies of PHOTO-ERA faithfully. My attention was accidentally attracted by your ad. of an investment-house, located in far-away Boston. I remembered that I always found PHOTO-ERA reliable and that its publisher stood behind each ad. large or small. When I wrote you for your personal opinion of this broker, the first I ever saw, in your paper, you said—"Go ahead; I'll back him up!" Your words acted like magic. Those mill-stocks are great! No need to assume any responsibility. You've done enough and I appreciate it. I surely do. Here's to "My Broker!"

With sincere thanks to PHOTO-ERA, I remain,

Z. G. RAYNOLDS.



A Hungry Camerist

IT is difficult to imagine the feelings of a well-known photo-pictorialist when, with an overdeveloped and intensified appetite, he discovered this sign on the door of the only restaurant in a small settlement near Yellowstone Park—"Gone to supper; will be back in an hour."—Cribbed from the *Boston Herald*.

Focusing with Large Apertures

THE growing tendency which has been shown by opticians to introduce anastigmats of large aperture, F/3 or thereabouts, calls for the exercise of a considerable degree of skill in focusing, since a very rapid lens carelessly used is not an altogether satisfactory tool, says a writer in *The British Journal*. The older generation of operators who had to work with large apertures in order to get sufficient exposure upon wet-collodion plates were adept in this direction, and when accustomed to using a certain lens could get much better general definition than could anyone who was a stranger to it. From recent observation we have found that most portrait-lenses, even those with intensities of F/3 and F/4, are being regularly used at F/8, the reason given being that the area, free of astigmatism at full aperture, was too small, and that the stopping down was necessary to increase the covering-power, and incidentally to give a greater depth of field. The modern anastigmat, however, is in a different class, as it covers a comparatively large field with uniform sharpness so long as the subject lies practically in the same plane, but without any advantage in the direction of depth. The problem to be faced is to avoid showing as far as possible this lack of depth in the print, and in passing we may be permitted to remark that the print should be the basis of judgment and not the negative. Details that appear to be very unsharp in the latter fall into their proper relation to the principal object in the print, particularly upon mat or rough papers.

As such large apertures are virtually used only for portraiture, we will first deal with the case of a fairly large cabinet head and shoulders, the subject being a man. If we follow the excellent advice of Sir Joshua Reynolds and make the eye the sharpest point in the picture, we shall find that the necktie and shoulders are badly out of focus, but starting from this point, if we begin to focus the necktie we can obtain much improved definition on this plane before the eyes become too unsharp. Even if the photographer has the best of eyesight a focusing-magnifier should be used for critical work, for although with the naked eye it is easy to see when a certain point is sharply focused, the magnifier is of great assistance in determining varying degrees of unsharpness.

With sitting figures, the procedure is much the same, but as the depth between the knees and the face is very much greater than that between the eye and the necktie we may have to call in the aid of the swing-back, at the risk of making the knees and hands—if these are shown—appear too large. What is probably a better plan is to raise the camera rather higher than usual, keeping the swing-back in its normal position. This will necessitate tilting the lens down, and it will be found that as the knees and face are now nearly equidistant from the plate, it is only necessary to “divide the focus” discreetly between this plane and the waist.

Standing figures being virtually all upon one plane present little difficulty with anastigmats, the depth of definition increasing as the distance between lens and sitter becomes longer. If possible, tilting the camera should be avoided, the figure being centered with the aid of the rising-front. It is as well to remember this fact when making head-and-shoulder portraits, and not to make the head larger than is absolutely necessary, and for the same reason “close-up” portraits of restless children should be avoided. A very slight movement between focusing and exposure will often mean a wasted plate with a head, but a full-length figure would in the same circumstances be quite passable.

So far, we have assumed that we are using a lens which gives critically sharp definition. If we can in-

troduce a little “diffusion of focus” the results will usually be more satisfactory, and fortunately most portrait-anastigmats are provided with the means to do this. The advantage is gained in two ways, the one being that the standard of greatest sharpness is lowered, so that the difference between various planes is not so clearly marked, and the other is due to the fact that there is actually a slight but useful addition to the depth of focus. One point has to be observed; the necessity to focus *after* the adjustment for diffusion has been made. This adjustment must be very slight for ordinary portraiture, since quite an appreciable gain in general definition can be obtained before any pronounced “soft-focus” effect is evident.

The most careful focusing is useless if there be any unrecognized trace of chromatic aberration existing in the lens, and cases of this have come under our notice, even with makers of the first class. Such lenses give widely different results in different hands. If we take the case of a photographer who focuses the sitter's eye and leaves the rest to luck, it may happen that the chromatic error just gives the necessary adjustment for general definition, but another more careful worker who makes this adjustment on the screen may find his sharpest point in a different plane from that which he expected. It is therefore desirable that any new lens should be tested by any of the well-known methods, so as to make sure that in photographers' vernacular it “works to focus.”

With portrait-lenses of the Petzval type or its modifications the procedure is very similar, but as they have a more or less concave field they behave somewhat differently. With sitting figures the rising-front should be dropped sufficiently to bring the center of the lens opposite the place where the sitter's head will fall upon the plate. The natural curvature of the field will then often be sufficient to give uniform sharpness over the entire subject at as large an aperture as F/3. With standing figures the curvature renders the use of very large openings impossible if sharp detail is required throughout, and this is usually the case.

With regard to the actual manipulation of the focusing-pin, we are of opinion that most people are too hasty. A gentle to-and-fro motion, examining the image all the while, is likely to give far more satisfactory negatives than a quick twist of the handle and an abrupt stoppage when one point appears sharp.

Red Lamps and Rapid Plates

Now that plates with speed-numbers of 400 and 500 H. and D. are in common use it is necessary to exercise great care in the illumination of the darkroom. We recently encountered a case, remarks *The British Journal*, where an operator who, during the summer, had been using a plate marked 200 H. and D., took up another grade marked 400, with the result that the latter gave very foggy results. As he had not encountered this with the slower plate, he blamed the emulsion and not his red lamp. It was easy to convince him of his error by filling in and developing in absolute darkness. Much of the red glass now in use is by no means safe for an ultra-rapid plate, and a fabric which has become faded is even worse. A properly made and tested “safe-light” is not an expensive item, and it is well worth its cost, as it gives the maximum amount of light compatible with safety. When using a doubtful lamp it is a good plan to fix a screen to intercept direct light from the plate during the early stages of development. When the image is well out there is less danger of fogging by inspection by the full light.



LONDON LETTER

CARINE AND WILL CADBY



THE KODAK CAR

MALCOLM ARBUTHNOT

THERE is one big event in London this month which has overshadowed every other, and that is the International Advertising-Exhibition at the White City. It has been an overwhelming success, and we have heard of and seen nothing else all this week.

It opened on November 27, with a brilliant pageant, a mile in length. The Organising Committee appointed by the Thirty Clubs were people of imagination and originality, and plans had been kept very secret, so that the public had an exciting surprise, and very delighted it was at such an amusing and interesting spectacle. To conceive and arrange such a wonderful procession had taken brains, time and sheer hard labor; but to achieve such a success was well worth the work put into it. We have never had anything like it before, and it is a sign of the awakening of our trade-interests and the new conditions. One can only describe it as a mixture of a Lord Mayor's Show, an historical pageant, and a dream of posters. The

Glaxo Baby, the Komo Mop, Fountain-Pens, "Bubbles" of Pear's Soap fame, all the well-known advertisement-figures had come to life. But what created most enthusiasm was a big car on which was displayed an enormous kodak as big as a house. On the top stood "Miss Kodak," who is so familiar to English and Continental kodakers. She took the different poses in which we are accustomed to see her on the Kodak advertisements, and her smiles from this elevated and rather perilous position moved the crowd to raptures. It was a clever idea; for this Kodak girl caught the imagination of the onlookers, and all along the line of the crowd she was greeted with hearty cheers.

We are told that this idea of the Kodak girl, in her striped frock, is not familiar to the American public. Perhaps, she is purely British, and—according to Mr. Bell, the clever Advertisement-Manager to the firm—one of her characteristics is that she is dumb. Unlike



THE KODAK GIRL MALCOLM ARBUTHNOT

many of the other advertisement-characters, no words are ever written under her name. She smiles at you, she beckons to you, she shows you her Kodak, but she only expresses her enjoyment of photography in her attitude and expression. They are so full of *joie de vivre*, that they say more than any words could. She typifies the charm of Kodak photography, and she has become an institution to Britishers throughout the world. This was the only photographic car that we could discover in the procession. There may have been others, for the procession was long, and the crowd large; but if there were, we missed them.

But this extremely entertaining procession was but the prelude to the big exhibition at the White City. It was open only one week, and had the organisers realised how the scheme would grip the imagination of the public, they would have arranged for it to stay open a longer period. As it is, the decision has been reached to hold another exhibition at a later date. A week was far too short, and the crowds that visited it almost defeated its object, in spite of the big space where it was housed, for it was difficult to get near some of the exhibits. Although we were there comparatively early in the day, it was already so blocked that we could move only with the stream.

Kodak has made another score here by capturing the first prize of a hundred guineas for Window-Dressing. It was a very simple and original scheme of striped material running back to a center in which was displayed one single Kodak. Only a photographer could have understood the value of thus focusing attention on the one essential object.

Not content with a pageant and an exhibition, the organisers of this advertising-adventure held a ball at Covent Garden. Here the Kodak girl was impersonated by Hylda Lewis, who is said to be, as a rule, the best-dressed woman in London. But some-

how, impersonations are always a little disappointing, and it is really best to leave people the pleasant illusions of Mr. Fred Pegrin's creations. No woman can be so tall and graceful and slim and classically built as in his charming, little drawings.

The papers are already well sprinkled with winter-sports photographs, for the season is actually beginning, and it is likely to be a record. The war closed down Switzerland for English visitors, and since 1914 a new generation has grown up, which, this winter, will experience its initiation in snow-sports. It has been our experience, for many years, that nearly every visitor to Switzerland in winter, whether man or woman, takes a camera and *uses* it. So we may take it that the photographic trade is busy, even in these days of slack business in other directions.

Sir William Abney, who died December 3, aged seventy-seven years, may truthfully be called one of the Photographic Fathers. His name has been a household-word (photographically) for many years in this country. The younger generation may not know it so well, for his photographic activities have naturally declined as his years increased. He was a skilled and prolific writer on almost all photographic subjects, and since 1903 has been adviser to the Board of Education (Science Department).

December 8 was, atmospherically, a black day in London. As one of the papers put it, "day did not dawn." It was not so much a yellow, thick fog of the usual kind, but an absolutely nightlike darkness, although no doubt the usual cause—London smoke—was responsible. It did not lift during the whole day.

Sir Charles Markham and Miss Gladys Beckett were married at St. Margaret's, Westminster, on the day of this darkness and the photographs usually made after the ceremony were quite impossible. But the photographer, who evidently was endowed with energy and enterprise, came armed with flashlight-apparatus, and the results were quite satisfactory, the light carrying well back even to the church-doorway, and also giving a glimpse of the spectators.

Binding Photo-Era

So many subscribers, camera-clubs and libraries are binding PHOTO-ERA MAGAZINES for the year 1920 and previous years, that we have received an unusual number of orders for back copies, which, with very few exceptions, we are able to supply.

Therefore, readers who contemplate binding their PHOTO-ERA MAGAZINES for any year or years, are requested to send their orders for any missing numbers to PHOTO-ERA MAGAZINE, without delay. The price asked for these back numbers depends upon their age.

Back Volumes of Photo-Era Magazine

The call for back volumes of PHOTO-ERA MAGAZINE has never been so great as at present. The educational as well as the entertaining features of the magazine are apparent to camerists who desire to improve their photographic work technically and artistically. We have the following complete volumes in stock, *ready for binding*—1904, 1907, 1908, 1909, 1910, 1912, 1913, 1914, 1915, 1916, and 1917. The price is 15 or 20 cents per copy according to the year—1904 to March 1917, 15 cents; March 1917 to July 1920, 20 cents. Postage 3 cents additional per copy. This is an excellent opportunity to obtain a complete file of PHOTO-ERA MAGAZINE at the old price. Orders will be filled as received and subject to prior sale.



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of December, the last issues of which have been disclosed to the public.

Patent, number 1,359,481, has been issued to George C. Beidler, Rochester, N.Y. on a Photographic and Developing Apparatus.

William Logan of Auckland, New Zealand has received patent, number 1,359,515, on a Camera-Sight.

Photographic-Film Hanger has been invented by Guy C. Cross of Denver, Colo. Patent, number 1,360,187.

Cheng Chih Kuo, of Ithaca, N.Y. has been issued patent, number 1,360,414, a Photographic Apparatus.

Patent, number 1,360,538, on a Photographic-Film-Winding Mechanism has been received by Robert Krodell of Rochester, N.Y. The patent has been assigned to Eastman Kodak Company.

William F. Gongaware, Ocean Park, California has been granted patent, number 1,362,787, for Title Attachment for Cameras.

Photographic Camera, patent, number 1,362,833, has been granted to Clyde C. Balston, New York, N.Y.

Patent, number 1,363,089, Printing Attachment for Photo-Printing-Machines. Thomas Garfield Cooper, Jefferson City, Mo.

Joseph M. Hoff of Dorchester, Wisconsin has been granted patent, number 1,363,117, for Film-Developing Machine.

Film-Holder, patent, number 1,363,184, has been granted to Nahum E. Luboshez, London, England, assignor to Eastman Kodak Company, Rochester, N.Y.

1,361,939. Camera-Shutter and Operating Mechanism. Thomas Wallace, Brooklyn, N.Y.

Film-Washing, patent, number 1,362,146, has been granted to Louis James San, New York, N.Y.

George H. Shaw, Camillus, N.Y. has been granted patent, number 1,362,193, for Photographic-Plate Holder.

1,362,548. Photographic Camera. John F. Wall, U. S. Army and John F. Coonan, Boise, Idaho.

Means for Marking and Identifying Negatives, patent, number 1,362,581, granted to Carl W. Schmidt, Piedmont, California; assignor to Ansco Company, Binghamton, N.Y.

ming and mounting; toning enlargements; spotting and working-up Ozobrome and Bromoil; defects and remedies for enlarged negatives. These various topics have been treated in an able manner, and constitute a work that should be in the hands of every progressive worker.

This book, in its third and revised edition and tasteful covers, is published by Iliffe & Sons, 20 Tudor Street, London, England, at 3 shillings 10 pence, which is a remarkably low price in these days.

"Photography Made Easy"

THE question of making successful photographs with the least exertion has troubled the minds of many camerists, who now may be glad to know that a book on this topic has at last been issued. It is entitled, "Photography Made Easy."

This useful volume of two hundred and sixty pages consists of thirty-two chapters, which are reprinted from articles published under the caption of "Lessons for Beginners" in the *Amateur Photographer*, and emanate from the able pen of Mr. R. Child Bayley, Editor of that English photo-weekly. In these easy lessons, presented in progressive stages, Mr. Bayley has gone into generous detail, so that even a child can comprehend the practice of photography. Every step in photography practice has been treated intelligently, accurately and with painstaking care, the chapter devoted to the lens being illustrated. The book is intended obviously for the English worker; so that the American reader will understand that "loading the dark slide" means, "filling the plate-holder"; and that "exposing the negative" really means "exposing the dryplate or film." By "developing the negative," Mr. Bayley means that it is the exposed plate or film that is being created into a negative; for, as he explains in several places, a negative is a plate or film that has undergone the successive stages of exposure, development and fixation.

This comprehensive book on photographic practice will be received with favor by every beginner or prospective camera-user, and even by many professionals who like to know exactly the reason for the various results that they obtain, successfully or otherwise. The book is published by Iliffe & Sons, Ltd., 20 Tudor Street, London, England, at 3 shillings 3 pence, which, at the present low rate of exchange, is virtually a gift.

One Among Them

THE artist beamed. A visitor—a wealthy-looking visitor, too—had paid a visit to his studio.

As he showed the great man around, he fingered lovingly the products of his brain.

"This picture," he said, stopping before his masterpiece, "took me nineteen months to paint. It was started in a garret—"

"Well, well!"

"And a hundred thousand wouldn't buy it now."

"No," returned the critical visitor, eyeing the masterpiece more closely, "and I'm one of the hundred thousand."—*Exchange.*

Photographic Enlarging

HERE is a book written by an expert photographer of wide experience—R. Child Bayley, the author of the *Complete Photographer*, and the editor of the *Amateur Photographer*. This valuable and practical text-book consists of one hundred and eighty-five pages and a complete index of subjects.

The contents is devoted to the apparatus used in the enlarging-process; daylight-enlarging; enlarging with artificial light; bromide paper; developers and enlargements; developing; modifying the result; trim-



WITH THE TRADE



The Wollensak Prize Contest

ON the opposite page, the Wollensak Optical Company, Rochester, New York, advertises a prize-contest which should be of immediate interest to all photographers. The number and the value of the prizes make the contest well worth the best efforts of every contestant. Those who fail to win a prize will receive a watch-fob of attractive design.

In accordance with an established Wollensak policy toward dealers and consumers, a price-readjustment is announced which shows a lower list-price on certain Wollensak products. This decision to pass on to the trade whatever reductions are made possible by lower manufacturing-costs is but one of the reasons why the Wollensak Optical Company enjoys its high position in the photographic world.

Of Value to Photographers

THE excellence of "Agfa" products is well known to photographers. As an aid to the successful use of these products, the Saganore Chemical Company, Inc., 120 West 31st Street, New York City, has issued two booklets, "Formulae" and "Flashlight," which are sent free of charge with orders and should be in the hands of all photographers who are eager to obtain the best results with "Agfa" chemicals.

The "Ciba" Book

WE are glad to call attention to the practical value of a booklet, known as the "Ciba" book, issued by the Ciba Company, 91 Barclay Street, New York City. The booklet contains many practical formulae, a hyperfocal distance table, helpful photographic suggestions and a table of weights and measures. The Society of Chemical Industry was established in 1864 at Basle, Switzerland and is said to be the largest chemical manufacturing company in that country. In addition to photographic chemicals, it manufactures pharmaceutical specialties, pharmaceutical chemicals and dyes. The company is entirely Swiss-owned, has a staff of one hundred and twenty graduate chemists and employs over three thousand persons. Copies of the "Ciba" book may be had free of charge at request.

High-Grade Colored Glasses

PHOTOGRAPHERS who are obliged to wear glasses or spectacles made of colored glass, may be interested to know that the best quality and scientifically correct grades of tinted glasses are made in Paris, by J. Scory, whose advertisement appears in this issue of PHOTO-ERA MAGAZINE. Monsieur Scory was in this country several years ago and supplied a number of our manufacturing opticians with a quantity of these tinted glasses, which gave utmost satisfaction and were considered superior to any similar glasses made elsewhere.

Photographers, who are interested, owe it to themselves to invite the attention of the optician who supplies them with these tinted glasses, to Monsieur Scory's advertisement, and in this way obtain the best article of the kind manufactured in the world.

For Stereo-Workers

Few workers of the Publisher's acquaintance have the requisite skill in finishing stereo exposures and producing from the negatives the best possible stereographs, on paper or on glass. The latter, in particular calls for special experience, which is possessed by W. M. Snell, himself a photographic expert and, for many years, head of the Lens and Camera Departments of the Robey-French Company, Boston, Mass. His advertisement, elsewhere in this issue, will be read with interest by all exacting stereo-workers.

Photo-Era Magazine for the Professional and Amateur

ALTHOUGH we have not emphasised the fact, PHOTO-ERA MAGAZINE is appreciated by a large number of professional photographers throughout this country. We have several hundreds as regular paid subscribers, which number has been constantly increasing, of late. In one morning's mail we received six paid subscriptions for the year 1921, from well-known portrait and commercial photographers, which proves that PHOTO-ERA MAGAZINE is appreciated by all classes of photographers.

Although every copy of PHOTO-ERA MAGAZINE may not fill the needs of the advanced studio or commercial photographer, it at least contains *something* that seems to repay him for the small investment of \$2.50 a year. In any event, no photographic magazine is published with more conscientious care, and effort towards supreme technical excellence, than PHOTO-ERA, and we are glad that our efforts along these lines receive the warm approval that comes to the Publisher from professional and amateur workers throughout the photographic world.

Improving the Tone of the Photo-Play

ALL lovers of the photo-play will rejoice that Chief of Police Fitzmorris, of Chicago, has prohibited the portrayal by motion-pictures of criminals at work, even though the end of the picture might show the criminal landed in a prison-cell. "It will make no difference whether the criminal shown is a hero or a villain," said this courageous official. "Even the showing of a policeman disguised as a burglar is taboo."

The order to censors to issue no permits for any photo-play depicting the commission of crime, became public when three youthful robbers, who were sentenced to the State reformatory, declared that their crimes had been inspired by a "crook" motion-picture.

Noisy Portraits

"It's true our prices are a little higher," said the photographer, "but then we give you a very life-like portrait."

"What's that commotion in the next room?" asked the lady in alarm.

"Oh, that's some of our speaking likenesses having a little argument," the photographer replied.—*Exchange*.

Wollensak World

PUBLISHED BY THE
WOLLENSAK OPTICAL COMPANY
ROCHESTER, NEW YORK



DEVOTED TO
LENS AND SHUTTER
INFORMATION

Vol. I

FEBRUARY, 1921

No. 2

\$100 IN PRIZES

Wollensak Amateur Photographic Competition Now Open

One hundred dollars in cash prizes will be awarded to non-professional photographers, in a contest closing April 1st, for pictures made with Wollensak lenses.

There will be 3 classes and 8 cash prizes as follows:

SPEED CLASS for speed pictures, made with the Series II Velostigmat $f:4.5$. First prize \$20.00; second, \$10.00; third, \$5.00.

PICTORIAL CLASS for pictures made with the Verito Soft-Focus $f:4$. Prizes same as Speed Class.

GENERAL CLASS for pictures made with any Wollensak lens. First prize \$20.00; second, \$10.00.

Every contestant, whether a winner or not, submitting two or more prints, will receive a handsome souvenir watch-fob of dignified and artistic design.

Each print must have on the back the name and address of contestant, lens used, and, if possible, diaphragm opening employed, and must be mailed to Wollensak Competition Mgr., 1415 Clinton Avenue North, Rochester, N. Y., before April first.

All pictures submitted become the property of the Wollensak Optical Company. Winners of prizes will be expected to turn over the original negative to the company.

Photographs of people, to be eligible, must be accompanied by the following form of release, signed by the subject. "I hereby grant permission to the Wollensak Optical Company to use my photo, taken by . . . , in their advertising and other publicity."

Photographs of minors should be

LENS PRICES REDUCED

Revised Price List Shows Lower Prices on Wollensak Lenses

There is one sure way to reduce prices. That is *reduce them*. And there are manufacturers who are voluntarily sustaining losses in order to help bring down the "H. C. of L.," by lowering their prices.

The Wollensak Optical Company, one of the last to advance their prices, is leading the way in bringing them back to normal. Their new price list now effective shows a reduction that applies not only to new orders but to all their unfilled orders as well.

Copies of new price list and catalog may be obtained from the company. A coupon is given below for your convenience.

accompanied by a similar release, signed by the parent or guardian.

This contest is an opportunity to every user of Wollensak lenses. Whether you win or not, the attractive watch-fob is well worth the slight trouble involved.



Significant Emblems

Here are three guides to the man who would buy wisely:

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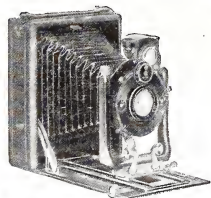
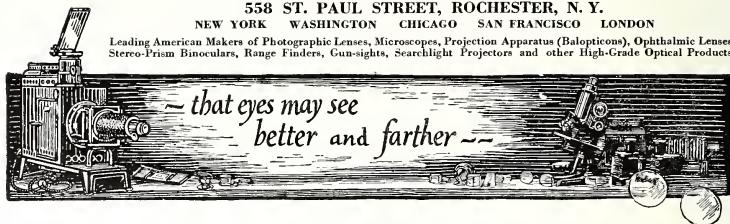
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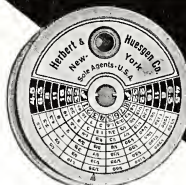
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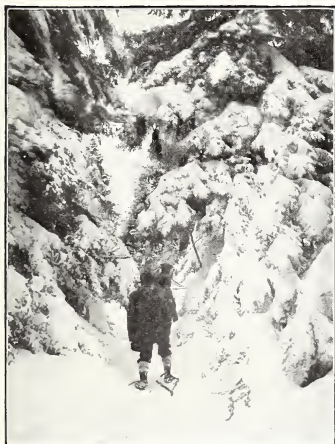


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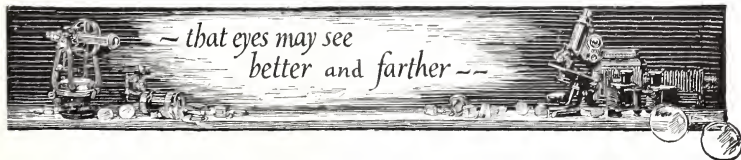
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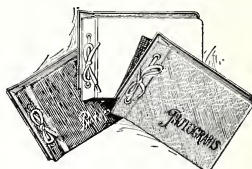
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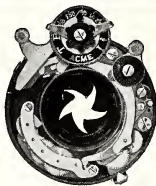
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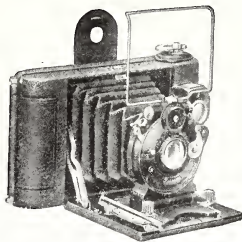
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The American Journal of Photography

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Vol. XLVI

MARCH, 1921

No. 3

The Camera in Algeria and Tunisia

Part Two

HERBERT B. TURNER



FROM El Kantara, for three hours, the train runs over the Sahara proper and finally comes to rest at Biskra—an oasis of one hundred and fifty thousand date-palms with nearly eight thousand inhabitants, over sixty-five hundred of which are Mohammedans. There are two towns, the New and the Old Town. The New Town with regularly laid-out streets is more or less European in aspect, although the greater part of the population is not composed of Europeans, but of Arabs, desert-tribes and Jews. Owing to its wonderful winter-climate and Oriental character, Biskra has become a favorite resort for Europeans, during the winter-months, especially since Robert Hichens wrote the "Garden of Allah," the plot of which is laid there. Naturally, hotels have been built that offer many modern conveniences available according to one's pocketbook—and these charge from two dollars a day to as much as six.

In the New Town, there are architectural features which are pleasing, such as mosques, churches, cafés—European and native—the streets of women of pleasure with odd little balconies draped with Eastern rugs, market-places from which caravans from the south arrive and depart, bazaars and perfectly fascinating shops filled with Oriental silks, rugs, jewelry, perfumes and leather-goods. Films for one's camera can be had in many stores, and photo-finishing, such as it is, can be arranged for and obtained.

The life of the streets is a constant entertainment; for, besides the variously garbed and robed natives—the costume of the Jew and his woman-kind being, perhaps, as striking as any—there are the English in cork helmets, the Germans in their outing-costumes, the Americans, the French soldiers in Zouave uniforms, priests,

holy men, scarlet-robed sheiks, camels, donkeys, Arabian horses and the motor-cars of the tourists.

At night, the Street of Women with its native cafés—where the Ouled-Nail women² do the abdomen-dance, and wild-looking men the sword-dance—offers Oriental pictures not to be forgotten. During the day, excursions can be made to the Old Town, about two miles away, where amid the date-palms there are rude villages, mosques and native graveyards not greatly different from those at El Kantara. Trips can be made out on the desert, which here is sandy, and to other oases, particularly to Sidi-Okba where the mosque and tomb of the saint of that name is to be found. Sidi-Okba, it will be remembered, was the Arab conqueror of the northern shore of the desert, about the year 670 A.D.

It would be easy to spend a month at Biskra, just enjoying its atmosphere, and making pictures and pictures, of the thousand and one odd events that take place weekly. With the hotels well equipped and comfortable, one can live with all the comfort to be found in any American or European resort.

Since we were there, the six days' camel-journey, or two days' motor-trip to Touggourt, an important and picturesque oasis farther south, has been reduced to a night's run by train. But we will not speak of Touggourt here, except to say that it is in the region of great sand-dunes.

Leaving Biskra by train, after luncheon, one is due at Constantine a little after ten at night. Constantine, in itself, is not an interesting city; but its situation is one of the scenic wonders of the world. The town, which dates back to Phœnician days, became Roman in due course of time, then Arab, and so on down to to-day when it is French. With its fifty-five thousand population, it is the third city in size in Algeria.



BISKRA

HERBERT B. TURNER

More than half of the population is European at present and the city is architecturally rather Victorian in style. Except for its native quarter, which is very picturesque, it is, in the main, rather borsome, except for its remarkable natural position.

It stands at an elevation of two thousand feet, and on three sides it is cut off from the adjoining country by a ravine fifteen hundred feet in its deepest part and over a thousand feet in its shallowest, the fourth side of the town terminating in a sheer precipice overlooking a large valley. The walls of this ravine are almost sheer, and the ravine is so narrow that it is spanned by bridges. Steps and sloping paths, originally built by the Romans, lead to its base, far below, and there are some ruins of a Roman bath where one can bathe to-day in a warm spring. Looking up from the bottom, one can realise the great height of this crack in the earth's surface, as there is just a ribbon-like part of the

sky to be seen overhead. But to make the place more scenic still, a part of it is roofed in by nature, forming caverns through which mid-way high a path leads.

These caverns would accommodate nine Cathedrals of Seville, next to St. Peter's, largest sacred building in Europe, three placed on top of one another and three end to end. To those of you who have been to Toledo, in Spain, I will say that the ravine there is a mere ditch in comparison, and the precipices at Ronda, tame. The drop from the world-renowned Pali, near Honolulu, is but a few hundred feet greater.

We were at Constantine January the first and second, and there were three inches of snow at the time. In fact, it spit snow at Biskra and ice formed there, which was something very unusual.

Above the ravine, some of the Arab houses are built flush with its walls so that if one fell out of the window, he would have an uninterrupted drop of fourteen hundred feet or more.



HERBERT B. TURNER

NATIVE STREET, BISKRA
TAILOR AT BISKRA

There is a good day's work for the photographer in and about the city, the main square of the place offering some pleasing studies and the native quarter many.

From Constantine to Tunis, the capital of Tunisia, is a long, fatiguing train-journey from early in the morning to late at night. The train is none too comfortable; but the dining-car makes up for some of what the coaches lack in comfort, its meals being exceptionally good and the wine superb. The way is not without interest; but I will not go into details, here.

Tunis, The White, with its two hundred thousand inhabitants, stretches over a vast

labyrinth of narrow ways lined with delightful Eastern architecture, more pretentious here than in any place we have yet visited. In the residential district the houses are distinctly handsome, with marble doorways that support great wooden doors decorated with metal-nails of huge size. Balconies project fancifully over the street, and with their richly carved screens allow the women of the harem to see, but not to be seen. In places, the streets are arched by the dwellings, and a sort of buttresses form all but covered ways.

In the heart of the city, there is a series of covered ways that radiate from a center, which,



OLD BISKRA

HERBERT B. TURNER

area on the shores of an almost land-locked lagoon. When viewed from a height, it seems like a sea of white, flat-roofed two-storied houses, relieved by the domes of many mosques, graceful minarets, and palms, the domes usually of tile in two or more colors, the minarets tall and striking. It is a great walled city within which hardly a white man has his dwelling; but outside of this wall there has grown a European town with regularly laid-out streets and parks, lined with shops, hotels and European houses. It is not of the European town that I write, but of the Arab city. The land upon which it lies is all but flat, and ranges of high hills are to be seen both north and south. Again we find a

when viewed from the top of the Palace of the Bey, suggests a great stone octopus. Inside are the bazaars or "*souks*" where, in a sort of semi-twilight, merchants sit cross-legged in their stalls and surrounded by their wares—rugs, carpets, leather-goods, perfumes, jewelry, metal-goods, candles, silk-stuffs, sandals, and dress-goods of all kinds. The whole labyrinth of covered passages serves as a mammoth department-store. Here, as on the streets, one mingles with the throng of gayly robed men and somber-clad women, the latter having their faces veiled in black instead of white, as in Algeria. In the outside shopping-district, one picturesque shop after another lines the way interspersed with



THE GORGE, CONSTANTINE

HERBERT B. TURNER

mosques and cafés. On each mosque is a notice forbidding Christians to desecrate it by entering, so the interiors are a mystery to the tourist, unless those he has seen in Algeria have made them an old story to him.

Tunis, with its superior architectural charm, its vistas, its mosques, its bending palms, its street-scenes and life, will be hailed with joy by the photographer. A tripod and much patience will have to be employed in the souks, if a picture is to be made, for a time-exposure must be given in them.

Near the city in a park, the former winter-palace of the Beys has been turned into a wonderful museum, called the Bardo, where besides things Tunisian there is housed the finest collection of Roman antiquities, outside of Italy, in the world. As all that is contained in the collection comes out of Tunisia, one can get a splendid

idea of the magnificence of their civilization on this side of the Mediterranean.

In the European town, outside of the walls, is the home-studio of Lehnert and Landrock, the famous pictorialists, who by the aid of photography have interpreted the spirit of the Desert, and the peoples and towns of Tunisia and Algeria. You all have seen reproduced some of these truly beautiful pictures in our *National Geographic Magazine* and elsewhere. At their shop, you can purchase in all sizes what you will of their hundreds of views, from postcards to 16 x 20 carbons. They also keep films and plates, and will develop for the tourist.

Just across the lagoon, on a strip of land that separates it from the sea, is all that remains of Carthage. Carthage was founded in 880 B.C. by Phenicians from Tyre, and rose to be one of the splendid places of the earth. In the



CONSTANTINE AND THE GORGE

HERBERT B. TURNER

years that followed, it was besieged by the Romans and destroyed finally by Scipio in 146 B.C. Upon its ruins, the Romans built a magnificent city which, centuries later, fell into the hands of the Vandal, Genseric, the conqueror of Sicily, Rome, Sardinia and Malta, on his expeditions out of Spain. He made Carthage the capital of the Vandal Empire. Time went on, and the city declined until, in 698 A.D., the Arabs destroyed it. It is reached easily in thirty minutes from Tunis by an electric train. Except for a few modern houses on the seashore; a great Catholic church on a hill; the ruins of a theater; some vaulted chambers said to have been granaries, and a few ruins sticking out of the fields, the remains of a once splendid city present an ideal place for a golf-field, the few scattered bits of ancient masonry making splendid hazards.

A hundred miles south of Tunis is the city of Sousse composed of a walled-in Arab-town, interesting in itself, and a smaller French town outside of the wall, flanked by the sea. I will not go into details with regard to Sousse, for it is much the same architecturally as other Arab-towns. I will state simply that in the French town, or under it, are some interesting catacombs, and the hotel of the city is very comfortable and pleasing. Sousse is the starting-point for the most wonderful and picturesque of all towns in Algeria or Tunisia, viz., the Holy City of Kairawan, which is reached after a thirty-six mile train-journey.

The railroad, a few miles from Sousse, turns in towards the Desert and soon makes its way over a barren, bleak steppe, passing on its way a vast salt-lake. The country is inhabited by Arab-like, nomadic tribes who move about with



STREET-SCENE, TUNIS
HERBERT B. TURNER



ARCHED RESIDENTIAL STREET, TUNIS

HERBERT B. TURNER

large flocks of camels. After about three hours' slow run, stopping at one or two stations along the route, the walls, domes and towers of Kairawan are seen to rise from a desolate country in all of their beauty. Outside of the city, gathered in groups, there seem to be thousands of camels and, here and there, the low tents of the nomads.

What Canterbury is to England, that, Kairawan is to the Arab of Africa. Founded by that darling hero of the Arabs, Sidi Okba, in 671 A.D., it gradually became the holiest city in Africa, a seat of learning and a pilgrimage-shrine for those of the faith. Surrounded by battlemented walls, with their strong towers and gates intact, it presents a scene never to be forgotten by those fortunate enough to have visited it. Above the walls rise fluted domes and graceful towers as fantastic and lovely in the sunshine as any Oriental dream city.

Between the railroad and the outer walls is a cluster of European houses, among them two hotels primitive but clean. Inside the walls lies the Bagdad of one's fancy. As the traveler explores one picturesque and fanciful street after another, he has to push his way through a maze of camels, donkeys, horses and natives, especially if it is market-day, when the city is teeming with life. Here are souks, vendors'

stalls shaded by the striped awnings of the East, strange houses and mosques, mosques, mosques!

The grandest mosque of Africa, the most sacred of all, outside of Mecca and Fez and standing as it has stood since the year 821 A.D., is, of course, the first to be visited. Europeans are allowed to enter it, as a punishment for a certain Arab uprising some scores of years ago; indeed, they may enter any in this most holy city.

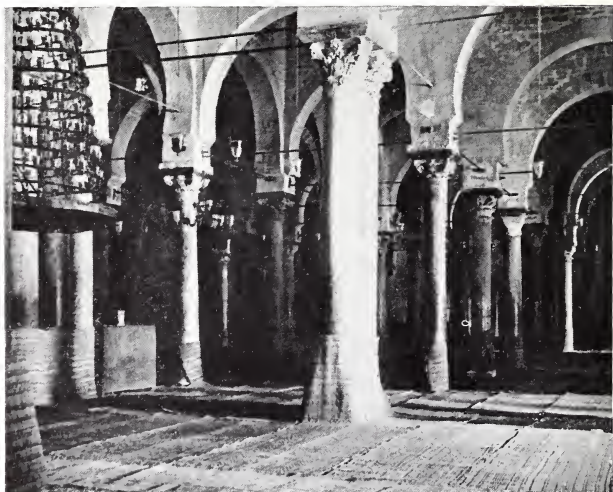
This, the Sidi Okba Mosque as it is called, is one of the oldest in the world, and rivals, no, surpasses, that of Cordova in Spain in size and beauty. Like that of Cordova, many of its forest of columns came from Carthage, as did many of pillars in Christian edifices in Italy. Through a gateway in its impressive outer wall, one enters a magnificent court 136 x 82 yards, surrounded by colonnades from which, at the end opposite the mosque proper, rises a very high and massive minaret. Facing the court, and entered through horseshoe-arches, is the main building, the roof of which is supported by hundreds of beautiful columns. There are sixteen aisles and eight rows of arcades. The Minbar is rather tasteless; but the Mihrab Chapel is decorated sumptuously.

It is not the details, however, that thrill one,



HERBERT B. TURNER

MOSQUE OF THE SABRES
THE GRAND MOSQUE, KAIRAWAN



KAIRAWAN, THE HOLY CITY
INTERIOR OF GRAND MOSQUE, KAIRAWAN

HERBERT B. TURNER

but the thing as a whole. It is glorious. The photographer may set up his camera and work to his heart's content—both inside and out.

Next comes the Mosque of the Sabres with its beautiful fluted domes, and then the Mosque of the Barbier which contains the relics of one of Mohamet's disciples, besides numerous others of less importance.

Kairawan cannot be described, it must be seen. It is a place one should dwell in for a week or two in order even to scratch the surface pictorially. It has an enchantment about it. The call to prayers from the many minarets will haunt one long afterwards. The cafés with their habitués will remain a mental picture for years.

It was on the roof of one of these cafés, the evening after our arrival, while listening in the moonlight to the call to prayer from the minarets that an Arab offered my wife and me a smoke from a waterpipe. I accepted and inhaled the most delicate aroma I had ever enjoyed. I

tried to purchase a pound of it, but the fellow only laughed and shook his head. I took perhaps a dozen puffs before descending to the street and starting for home. On the way back, I felt very much set up, rather as if I had drunk an extra amount of champagne. I asked our guide what kind of tobacco it was I had smoked. He said that it was not tobacco at all, but hashish.

With Kairawan I have finished this article. We saw other places, but have just made a beginning of what this southern shore of the Mediterranean has to offer the wanderer. We intended to return the next winter and do more, but then came the war.

We hope some day to push farther into the desert—to Chardafia, at any rate, to go south from Sousse via Sfax to Gabes, visiting the great Roman amphitheater at El-Djem on the way, and from Gabes work our way into the Troglodyte country whose inhabitants live in the ground with pits as courtyards.

Retouching for the Amateur

In Three Parts. Part One

DR. H. GRASCHOPF



NOT always with justice is the retouching-work of an amateur looked upon with a certain degree of prejudice; but it is quite unfair that this necessary branch of intermediate photographic work receives, both in handbooks and periodicals, much too little attention. The reason for this quite peculiar circumstance, I think, may be looked for chiefly in the scanty interest on the part of amateurs, that is given to retouching; not least, however, also is the undeniable fact that the so-called retouching is not easy and requires considerable practice and special experience, and in any case a certain amount of skill and dexterity, that not every amateur who can use the tools on a pinch possesses. I consider the antipathy of amateurs to all kinds of retouching psychologic, simply because the work is not principally constructive, but merely helpful. In other words, because one cannot see when a picture is retouched and just considers it natural that it is without fault. Retouching only removes defects, but produces nothing new. But those amateurs who make pictures and retouch them either in the negative or the positive, mostly

take up special work after they have had a fundamental, practical introduction to it in a studio or in a club. However, when I speak generally of the retouching-work of the amateur photographer, I do so with the special object of bringing nearer to him this altogether too indifferently treated branch of the great photographic community in the form of a brief essay, and shall be happy if I succeed in arousing his interest.

In the first place, I would suggest that it is far from me to attempt to give anything like an exhaustive treatment of the subject, and I must limit myself to the scanty space at my disposal in writing about it and merely throw some light into individual corners. Should my efforts to awaken interest meet success, then the desire for the preparation of a special brochure will spring up of itself.

By retouching, in the sense in which it is hereafter treated, I mean all corrective work for the purpose of eliminating defects in photographs, either in the negative or the positive. So long as retouching is limited to the removal of faults and errors in the picture, it is undeniably useful and necessary; but we question the propriety

of the so-called retouching when it encroaches so far, as it does at times in portrait-photography, as to cut out whole parts of the picture or gives the sitter "younger" features, to please his vanity and thus falsify photographic truthfulness. In this latter case retouching is commonly spoken of incorrectly; in this case only the working-methods of retouching are employed, faults are not removed; but by retouching means and appliances, certain well-known technical expedients are practiced that change the appearance and very often the character of the picture as a photograph.

In defining the word, "retouching," I said that its object is to eliminate defects in the negative or positive, and that retouching of the negative differs entirely from that of the positive; but besides these there is *indirect retouching*, of which I shall speak in the last section of this article.

I shall first speak briefly of

I. Negative-Retouching

Many negatives, in their original condition, when examined by transmitted light, look clear, but have transparent or opaque points, streaks, spots and stains, which later in the positive have a disagreeable and injurious effect and in some cases render the picture useless. The cause of these defects is usually dust which covers the plate at the time of exposure and thus prevents the action of the light; or in mechanical injury, such as by a strong stream of water; or in pin-hole spots such as often accompany strengthening the negative with sublimate; and, in rare cases, by defects in the emulsion that cause air-blisters, which, when flattened, produce holes. The efforts of the photographer must be quite logically to avoid, as far as possible, such defects in the negative by preparing everything beforehand so as to ensure perfect work and to limit the retouching to a minimum in the circumstances.

I should also mention, in passing, that air-blisters caused by careless developing will prevent the developer from acting on the coating; it is generally very difficult to retouch such holes, for as a rule they are rather large. This, however, is a defect that may be avoided by moderate care in placing the plate in the developer and by constant rocking of the tray during development.

Defects in the beauty of the negative are often unavoidable, since almost all plates are more or less affected by them; if the print cannot be corrected, then they must be removed. Should this call for manual work on the plate other

than removing defects, such as grading off the background, inserting or removing clouds, etc., then I should not do it by such larger changes in the negative, but rather by means of *indirect* retouching as worked out by me.

For retouching negatives more conveniently a so-called retouching-desk is generally employed, which is constructed with a sloping frame provided with a groundglass on which the negative is laid, and the parts surrounding the place to be retouched are covered by a cardboard or other mask; this is illuminated from beneath by a mirror fixed at an angle. For the purpose of shutting off the light from above, a hood of cardboard or a wire-frame covered with a focusing-cloth, under which the work is done, is placed over the desk. A regular focusing-desk gives good service and does not cost much, and should be included in the outfit of every amateur. To say more regarding a retouching-desk would be superfluous; any one who has ever worked with one will understand its handling and its advantages. A regular desk, however, is not absolutely necessary; a plate of groundglass or a plain glass covered with a sheet of white paper upon which the negative is laid will answer in case of necessity. This, of course, is held in a sloping position over a mirror, which makes the work considerably more difficult.

In examining a negative on the retouching-desk, every faulty speck becomes plainly visible. To those who have not had practice, it is advisable to have a print of the negative made on ordinary photo-paper, so that by comparing it with the negative the spots and their intensity can be verified more easily.

The so-called retouching of the negative is done by quite ordinary means. The smaller clear spots are covered with a lead-pencil, which of course must have a very fine point which may be produced most easily by rubbing on a piece of fine leather, or, as school-children often do, by rubbing on the sole of one's shoe. The pencil should be of medium hardness, and any kind free of grit may be used. All pressure must be avoided. A single, light going-over will not do; it must be repeated two or three times, making the strokes at an angle to the previous ones. Pencil-retouching, to be sure, is effective only to a certain degree; but is so far easy to do, because the color of the lead generally agrees comparatively well with that of the negative, and the intensity can be judged quite readily and surely. But the coating of the negative takes the pencil only to a limited extent, and the emulsion must be given a coat of mat varnish, which can be obtained at any photo-supply store, or one can prepare it himself, or have it



HER SMILE
VANTINE STUDIO



THE GLORY OF WINTER

H. L. BRADLEY

put up by a druggist according to either of the following practical and satisfactory recipes:

I. Cold Negative-Varnish

Gum sandarac.....	50 grams	13½ oz.	} by weight
Benzol.....	200 "	7 oz.	
Aceton.....	200 "	7 oz.	
Absolute alcohol.....	100 "	3½ oz.	

II. Mattolein

Gum damar.....	10 grams	154 grains
Oil of turpentine, rectified.....	75 "	2½ oz.
Benzine.....	75 "	2½ oz.
Lavender oil.....	5 "	75 minims

The cold varnish is poured over the cold plate which is tipped quickly, but gently, from side to side till covered perfectly and the superfluous varnish returned to the bottle by one corner of the plate. With the mattolein (or alcohol and castor-oil) a couple of drops are poured on a soft linen-rag and rubbed on the spot to be retouched, and the retouching can be done with a pencil in a few minutes.

As will be seen by the few preceding words, retouching is quite simple, even for an amateur, and he should always endeavor to do the work in a technically correct manner. Photographing is not completed with the mere making of the picture; every photograph should be worked out technically as perfectly as possible.

Pencil-retouching is naturally quite limited in its application. Spots of clear glass in the

negative should be covered with color by means of a fine brush. This work is also comparatively easy to learn. The whole secret of retouching with color consists in getting the right moisture of the color and in not enlarging the spot to be covered. A fine sable pencil-brush is to be used, the hairs of which lie compactly together, and, when touching the spot, it should not be bent over. The color should not be too moist, otherwise the coating will suck it up like blotting-paper; but neither must it be too dry, or the brush will not give any color. Retouching with color is really not difficult to learn, but always requires some practice. Generally, the retouched part will print too light, which shows that too much color was applied. After a few trials and a little practice, success will be attained and many negatives can be saved by a few touches with the brush. For retouching negatives, almost any kind of watercolor can be used. The best is neutral black, which may be mixed with sepia, because this color comes nearest the tone of the negative and permits an easy comparison of the strength of the color with that of the parts surrounding the spot to be retouched. Colors in tubes can be obtained in the supply-stores with which clear-glass spots can be made entirely opaque, but the same object can be attained with ordinary colors. If it is desired to print large portions of the negative

light, the glass-side can be painted with a suitably strong transparent color, such as carmine or gamboge. I should remark that in this, every amateur should always and unconditionally work so as to obtain the best results, using the means that seem most appropriate. He can find many useful hints and directions in different books; but must hunt up for himself what seems most suitable for his skill and hand. Then, as I have already said, retouching will be only to a certain degree mechanical work, but otherwise thoroughly individual, and should not be made mechanical by the unthinking use of suggestions and recipes. The amateur should study the way by which he can most surely attain his goal; for it is up to him to choose one way or the other, or else to seek a new way for himself. A standard for correctness or suitability is, compared with the difficulty of the way, only a question of whether it leads to the goal or not.

I have so far spoken only of how clear or transparent spots on the negative are retouched; now a few words as to how dark places are lightened and dense spots removed. So long as the plate is not varnished, such dark, black spots, or small objects that should not appear in the picture, are scraped off with an etching-knife. Such scraping certainly requires more skill and experience, as it is only too easy to cut away too much or make a hole or gash in the coating. The knife must be shaped like a spatula and be very sharp. Such knives, called cutting-pens, are also to be found in the supply-stores. They can be stuck in a penholder and,

when worn dull, can be thrown away. These cutting-pens are very good, but must be fixed firmly in a stout holder.

When it is our task to cover large surfaces of the negative, we can either, as already explained, cover the glass-side of the negative with a transparent color or with a mat-varnish, from which all those parts that are not to be covered are afterwards scraped or "etched" out. It has also been advocated to smoke the glass-side, wiping off the parts not to be covered. But this method seems too crude to be recommended, not to mention that, personally, I never could make friends with it and, perhaps for that reason, had little success with it.

It would take me far beyond the limits of this article if I should attempt to speak of all the practices and possibilities of retouching. In any case, plenty of room is left for the amateur to make use of any retouching-method that seems good to him, or to think out new methods and try them, for this field of technical work is but little cultivated.

Merely for information, I should mention that various apparatuses under all kinds of names have been constructed, driven by hand or foot-power, electricity, etc., either the retouching-pencil or the negative being given a rapid vibratory motion, making strokes or points on the negative. All these apparatuses are comparatively costly and are designed especially for professional photographers, so scarcely come within the sphere of the amateur and will be passed over.—*Photographische Rundschau*.

(To be continued)

Fundamentals of Print-Criticism and Appreciation

Part Three—Technical Quality: What It Is

AUGUST KRUG



TO criticise fairly a photographic print from the standpoint of technique, of course, a working knowledge of the processes which culminated in the production of the print is necessary. These processes include the exposure of the plate in the camera (film, of course, is included in the generalization); its development; after-treatment of the negative, and the making of the print.

To begin with, the exposure should be the correct one for the type of subject and the result aimed at. It may be the normal exposure,

or it may be what is ordinarily termed underexposure or overexposure. It is fairly well understood by photographers that the three belts of exposure first explained by Hurter and Driffield have easily-recognised characteristics.

Thus, underexposure, or less than normal, extends the scale of the lights and flattens that of the shadows. This is desirable, sometimes, in portraits, for example, with the features well lighted, as it tends to subordinate the rest of the picture and accentuate the features.

Overexposure, more than normal, on the other hand, lends importance to the shadows by

increasing the perceptible gradations. Normal exposure, we may say, is that which will give the best rendition of the lights and shadows in a not too contrasty subject, with full gradation throughout.

The critic should consider whether the subject of the print under judgment is best interpreted by the scale of values which the exposure (development assisting) has determined. If not, attention should be called to the fact that the print loses thereby.

It is rather important that the critic be able to distinguish sharply between differences of exposure and development. Very similar prints may have subtle variations, due to entirely different causes. If the critic does not know the disease, how can he prescribe the remedy?

A word of caution, here, will not be amiss. The critic should be able to recognise at a glance those prints which in their making permit altered values, sometimes otherwise known as "hand-work," "manipulation," or even "faking." In this category are gums, gum-platinums, oils, bromoils and, to a limited extent, carbons. Other processes permit manipulation; such as glycerin-developed platinum and gaslight-papers, and "dodging" in enlarging. It is well, therefore, before venturing upon criticism based upon inaccurate knowledge, to inquire whether the print is a straight one from an unmanipulated negative. It is very often possible to deduce the fact of manipulation from the appearance of the other objects in the print, much as the meaning of an unfamiliar foreign word may sometimes be inferred from the context.

With straight prints, then, the fact of underdevelopment will be apparent in a compressed scale, resulting usually in a dark print. Overdevelopment is indicated when the scale is too great for the printing-paper to render properly. What is correct development for the carbon-process would be overdevelopment for gaslight papers, and so on. Development should be judged, therefore, according to the result desired. Development controls the degree of contrast only, the amount of gradation remaining the same whatever the time of development. It is apparent, therefore, that effects are secured by lighting, exposure and printing. Development is then automatic, and is carried out in tanks.

After-treatment of the negative may be advised by the critic if, in his judgment, it should be necessary. Intensification and reduction are at best, however, extremely risky processes, and largely unsatisfactory. Very often, they can be dispensed with by making the print in another medium. Or, if the nature of the subject will permit, the critic should advise, instead, the

remaking of the negative, when other faults can also be rectified.

In pictorial photography, the negative is of actual value only as it will produce good prints. Print-quality is the important thing. It is hard to define, but easy to distinguish in the print itself. The various printing-processes all have distinct merits and shortcomings. It is also, ordinarily, easy to tell by its appearance the process by which a print was produced.

Thus the bromide and gaslight papers, now so much in vogue, give images in black and brown. Other colors—blue, green and red—are sometimes met with, and their peculiar tones are easily recognisable. This type of print, when well done, is of a soft, velvety appearance, with a certain transparency to the shadows. The lights are brilliant and the gradations smooth. The image appears to lie on the surface, with most papers.

With platinum, palladium, kallitype and other plain-paper processes of like description, the image sinks into, and becomes a part of the paper. With heavy shadows, waxing is often resorted to. It is asserted—and experience seems to bear it out—that this class of papers is better able to reproduce delicate gradations than the gelatine-class mentioned above. Very often, however, the critic will be hard put to distinguish between a mat-surface bromide and a platinum print.

Carbon-prints are to be known by the gloss in the shadows, which is not so apparent in the lights. Carbon is a very-long-scale process, and, in addition, prints of many colors may be made—two important factors in establishing their identity.

Next, come the controlled pigment-prints. Gum-prints can be distinguished by their (generally) forced lights and limited scale. The gradations are not smooth and are broken up by grain. Of course, there are multiple-gum prints, wonderfully smooth, which are in effect simply carbons, laboriously constructed. Examination will probably disclose in these a looseness of outline, due to lack of register, which is not apparent in carbons. Single-gum prints are, perhaps, the easiest of all to identify.

A modification of platinum, palladium or bromide is introduced when a gum-coating is put over the print, acted upon by light or chemicals, and developed. This method yields a typical print of the class named with additional richness in the shadows due to the gum-coating. There is generally a graininess apparent in the lower middle register.

Oils and bromoils look much the same, when finished. They present a variety of appearances,



Courtesy Imperial Dry-Plate Co., Ltd.



OFF THE BEATEN TRACK
WILL A. CADDY


and usually are characterised by a peculiar grain, which is due to the pigmenting-brush. Continued working may produce an even-toned print by eliminating the grain giving a texture-less image. It is a question whether the lack of texture is wholly advantageous. There is little use to make a bromoil which looks like a bromide.

Knowing, then, how the print ought to look, the critic will have no difficulty to criticise it from the technical standpoint. However, he will not, for example, request that a low-keyed print be made in a more extended scale. Perhaps, the maker deliberately chose to accentuate his lights by drowning the rest of the print in shadow. It would seem to me that it is permissible

to ask that certain parts of the print be made more definite or less so; but it is a mistake to dictate the entire tone of the picture. After all, the critic is not making the picture; his powers, generally self-assumed, should have a limit.

A word, now, about common sense. It is of little practical utility to recommend making a bromoil to one who is still struggling with the intricacies of time and temperature for his film-tank. One must suit his criticism to the technical caliber of the print-maker. With the authors of salon-prints, however, and other big guns, no tempering of the blast is necessary. They are supposed to be as well-versed technically as it is possible for a photographer to be.

Developing Highly Sensitive or Color-Sensitive Plates by Candlelight

N the Swiss periodical, *Die Photographie*, Dr. Lüppo-Cramer published recently an extraordinarily simple method for developing in clear, yellow light without fogging the plate. In his scientific studies of optical sensitising he found that the dye safranin lessens enormously the sensitiveness of silver-bromide. If ten cubic centimeters of a solution of pheno-safranin, one part to two thousand parts of water, is added to an ordinary developer, common as well as color-sensitive plates can be developed without risk in very clear, yellow light after being immersed in the developer for about one minute. The plate may also be taken from the developer without danger during development in order to examine by light the progress of the work, since the solution does not act merely as a screen, but through chemical action of the safranin upon the silver-bromide. In the meantime, he has succeeded in so working out the method, that he does not use a darkroom-lamp of any kind during development. Excluding the light, he bathes the exposed plate for one minute in the pheno-safranin solution of 1:2000 (this coloring-material is obtainable from the Höchst Dye Works or its agents) and then places it in the developer after first lighting a common stearine candle at a distance of five or six feet from the developing-tray. With this clear light, even highly sensitive panchromatic plates may be developed without any danger of fog. Even the "chemical fog" that often affects plates sensitised with iso-cyanin, even without the entrance of light,

is completely prevented when developed in a developer containing the pheno-safranin solution. It goes without saying that this discovery of Lüppo-Cramer's is a valuable improvement and one which is worth the careful investigation of practical and ambitious photographers in their work.

In addition to the above, Lüppo-Cramer supplies the following information. After the required strong coloring of the plate in the pheno-safranin solution of 1:2000 for one minute, for developing by open candlelight, even after long washing the negative often remains partly colored if the plate is thickly or unevenly coated. Great care must be taken to fix very thoroughly in a good acid fixing-bath; then wash for half an hour in running water, and in case any coloring still remains, bathe in a solution of about equal parts of a two-per-cent solution of alum and a five-per-cent solution of hydrochloric acid until the color disappears, which it will do in a few minutes. Of course, after this bath the plate must be again washed. Tolu-safranin acts very much the same as pheno-safranin, but offers no advantage. The Brilliant Rhodulin-Red, that Dr. E. König sent me recently with a series of other dyestuffs, acts well also as a preliminary bath for developing by candlelight; but it works no better than pheno-safranin. Especially strong is the desensitising action of methylin blue which works at a dilution of even one part in five million! but it is practically inutilisable, as if more concentrated it produces chemical fog.

Photographische Industrie.



PLAYING AT SEINING

KODAK PARK CAMERA CLUB

E. P. WIGHTMAN

The Kodak Park Camera Club

E. P. WIGHTMAN



IN January 13, 1920, the Kodak Park Camera Club was organized in order to promote interest in photography among the employees of the Kodak Park Works of the Eastman Kodak Company. It was the object of the club to give an opportunity to members to hear talks on photographic subjects; to see demonstrations of various kinds; and to bring together those interested in photography that they might benefit by each other's experience.

Any employee of Kodak Park is eligible to membership in the club by payment of the yearly dues which amount to the very small sum of fifty cents. Indeed, they are nothing when compared with the advantages gained, about which more will be said presently.

The initial membership was forty-seven. In a little less than one year, this membership has been increased to about two hundred and twenty-five, and in the near future a campaign is to be

begun with three hundred as the goal. A large majority of the members are strictly amateurs and, for the most part, beginners.

The club meets regularly once in two weeks on Tuesday evenings. At the present time, however, it is conducting a series of twenty-five talks on various topics of photography given by scientific and technical experts connected with the Eastman Kodak Company. These are held on the alternate Tuesdays between the regular meetings. These talks are given principally for the benefit of the beginners in photography. They tell the why-and-wherefore and the how of things, in simple non-technical language.

Throughout the year, but particularly in the spring, summer and fall, when the weather is favorable, the club holds hikes or basket-picnics to places of scenic interest, of which there are many in and around Rochester. These trips usually take place on Sundays.



A BREAK IN THE CLOUDS

H. HUDSON

KODAK PARK CAMERA CLUB

One of the principal features of the K. P. C. Club is its Semi-Annual Contest and Exhibition held in the Spring and Fall. The first one took place during the past October and November. Previous to that, there had been held a few monthly contests in portraiture, winter-scenes and other special subjects, but with the organization of the semi-annual contests, these were abandoned.

The object of these contests is to stimulate a lively interest in artistic photography, and to encourage the beginners as well as the more experienced amateur photographers to do better work. Only amateurs were allowed to compete in the October contest, although the members of the club classed as professionals were requested

to send in pictures for the exhibition in order to make it as interesting as possible.

Both contact prints and enlargements were accepted, the maximum size being limited to eight to ten inches. All prints were mounted. They were divided into five classes: (1) Portraiture, (2) Landscape, (3) Marine, (4) Architecture and Interiors, (5) Genre. In each class, the pictures on the closing day of the contest were arranged in the alphabetical order of the names of the competitors in that class, a number was attached to each print and the prints were then hung so as to preserve the classification, and also those of each contestant were separated slightly from the others so as to make them easily distinguishable.



THE GORGE

KODAK PAPER CAMERA CLUB

LLOYD A. JONES



"HAVE SOME?"

KODAK PARK CAMERA CLUB

H. HUDSON

About two hundred prints were submitted in the contest, and about twenty-five others were entered in the exhibition only. In the former, there were twenty-five competitors. This number is a rather small proportion of the total membership; but in future contests it is hoped that more members can be induced to take part.

In the October contest, no distinction was made between beginners and advanced amateurs, also the only part of the work required to have been done by the contestant was the exposure of the film or plate in the camera. Of course, the picture of a competitor who had done the entire work himself was given the preference over one by a competitor who had made only the exposure of the film. In the next contest a new arrangement is to be made so that the beginners and advanced photographers (includ-

ing professionals) will be grouped separately and the former will not have to compete against the latter, *i.e.*, each group will have a contest of its own.

The pictures were judged on the basis of (a) artistic merit of the picture itself, (b) photographic technique and (c) mounting and general appearance. The judges were three in number—Mr. J. DiNunzio, Mr. L. E. Jewell and Mr. A. A. Maurer.

Three cash prizes were awarded in each of the five classes—first prize, \$10.00; second prize, \$5.00; third prize, \$1.00, and also the rules allowed six Honorable Mentions, in each, provided there were sufficient pictures worthy of them. A competitor was not allowed more than one prize in any one class, and not more than three prizes in all—thus preventing



POSTER-DESIGN

C. W. GIBBS

KODAK PARK CAMERA CLUB

one or two competitors from carrying off all the honors.

In order to supply the judges with information, for example as to whether or not a contestant had been awarded all the prizes which had been allowed him, or whether a picture was produced entirely by the contestant, or was partly his own and partly that of someone else, the judges were accompanied by the president of the club, who was not competing in the contest. No one else was allowed to be present at the judging.

The winners in the First Semi-Annual Contest were as follows:

1. PORTRAITURE

Prizes

- 1st. E. P. Wightman
- 2nd. C. W. Gibbs
- 3rd. H. Hudson

Honorable Mention

- Dana Acker
- F. Sauer
- H. A. Tucker
- H. N. Wood

2. LANDSCAPE

Prizes

- 1st. L. A. Jones
- 2nd. E. P. Wightman
- 3rd. H. Hudson

Honorable Mention

- W. K. Evans
- R. Leavitt
- F. L. Wadman

3. MARINE

Prizes

- 1st. L. A. Jones
- 2nd. E. P. Wightman
- 3rd. H. Hudson

Honorable Mention

- Herbert Wickenden

4. ARCHITECTURE

- 1st. F. Wadman
- 2nd. Harry Buck
- 3rd. C. W. Gibbs

5. GENRE

- 1st. D. S. Mungillo
- 2nd. C. W. Gibbs
- 3rd. K. Gruppe

Several of the best pictures are herewith reproduced.

The contest closed October 31. By November 3, the pictures were hung in the Recreation Hall at Kodak Park, and were judged. They



THE BROOK IN WINTER
JAMES M. TRAYHERN
KODAK PARK CAMERA CLUB





A PORTICO

KODAK PARK CAMERA CLUB

F. L. WADMAN

were left on exhibition during the month of November.

The method of hanging might be of interest. To each picture was attached a paster-hanger consisting of a loop of wire fastened to a gummed linen-sticker. The pictures were then hung on portable folding-screens made of compo-board covered with burlap.

What it is in human nature which causes people invariably to want to touch a picture, when they see it hanging in an exhibition, is to the writer more or less of a mystery. But this fact was found to be almost universally true, and hence, in order to prevent damage to the pictures, it was necessary to stretch a rope waist-high at a distance of three feet or more from the screens.

As soon as all the pictures had been hung for the exhibition, a list of entries was made, a

mimcograph copy of which was sent to each member of the club, also a copy was posted for the benefit of visitors.

To each of the prize-winning prints was attached an appropriate ribbon (blue for first prize, red for second prize, white with black lettering for third prize, white with red lettering for honorable mention—violet would probably have been more appropriate) on which was printed the legend concerning the prize. These ribbons together with the prize prints became the property of the Camera Club. All other pictures, except those offered for publication, were returned to their respective owners. Within a week of the awarding of the prizes, a cheque for the proper amount was mailed to each of the winners. [Since writing the above, Dr. E. P. Wightman has been elected president of the Kodak Park Camera Club.—EDITOR.]





TO THE RESCUE!

JOSEPH COBURN SMITH

Man's Friend



WHEN the balloonists were rushing to doom over the far ice-fields, and when they knew nothing of their location, but were helpless and almost hopeless at an altitude of 6,500 feet, they heard a dog bark. It changed everything. In an instant hope was rekindled and life came back. As quickly as they could the men were returning to earth, brought down by the bark of a dog. The rest of the whole thrilling story has been told in the daily despatches.

It is a rare part of man's life which is not touched by the friendship of dogs. Books of experience in the World-War are coming from the presses by scores, and it is interesting to note that practically every one of them has dog-stories, and the theme of these stories is faithfulness unto death. There is fine intelligence, too, and the whole happy history of dog-character is enriched by new instances of noble acts.

It is this fellow-feeling that makes almost impossible the enforcement of dog-laws. Mary-

land has a very stringent law against stray-dogs. It has been proved time and again that stray-dogs do large damage; that they kill sheep; that they are a public nuisance. The law against them is definite and drastic, and yet it is a dead letter on the books.

Who wants to kill a dog, even a stray-dog? Perhaps it was a stray-dog that brought the balloonists down—a dog lost in those Northern wilds, or perhaps it was the dog of an humble shack where there was a warmth and kindness. Man's love for the one covers both, and so we have dog-laws and dog-laws and nobody enforces them. Why? Because the dog is man's friend. He may have his faults, and many of them, but still he is man's friend.—*Baltimore American*.



If you are dancing around trying to get great pictures with little trouble the best thing you can do is to reverse.
A. SEAMON STER.

The Child in Photography



AND in hand with the advance of science, we witness a constant unfolding of new possibilities in the realm of photography. It is, above all, thanks to the untiring efforts of the amateur, that the suggestions of the scientist are being utilised by the experimentalist to produce those new and characteristic methods of representation, the scientific and educational value of which are incontrovertible.

At the present day, more and more use is undoubtedly being made of these modern methods of illustration in conjunction with the newest processes in developing; and for this there exists no more suitable field of study than that furnished by the everchanging aspects of childhood.

The fact that a large number of photographers still shrink from undertaking child-photography is to be attributed to an exaggerated idea of the difficulties connected with this work, rather than to a lack of interest in the subject itself. Nevertheless, in spite of occasional happy results produced in this line, it is absolutely essential, in order to ensure success, that cameras be supplied with the best optical and mechanical equipment.

A disturbing background frequently suffices to discourage the photographer from undertaking a picture. For this reason, it should be mentioned that a good photograph can be obtained even without an artistic background. Moreover, it should be borne in mind that a picture furnished with such an artistic background, even though possessing superior technical accuracy, cannot be said to be improved by the elimination of the natural surroundings.

If, on the other hand, a good photograph of a child amid its natural surroundings be produced without the help of an artistic background, the photographer herein achieves what may be termed perfection of expression. But if an open-air picture devoid of any such background be desired, the pictorial effect of the natural background must be considered in its relation to the child. For this purpose, it is not sufficient to test the nature of the groundglass; neither, as in the case of landscape-photography, should the effect of the colors be the only point considered in order to avoid the production of vague outlines. The more closely the natural background is brought in contact with the child, the more complicated will the photograph become. A satisfactory method of dissociating the child from its backgrounds is, however, obtained by means of reflection, and by focusing the light

strongly on the child, thus obtaining a background of dim and uncertain outlines.

All these rules, of such fundamental importance for studio-photography, should be equally closely adhered to in the case of open-air photography, if the object desired be to faithfully portray the essential character of a child in as far as it is possible for the camera to attain this ideal. Moreover, it should be borne in mind that true success in this domain is a product of genius—and for that reason, to lay down more specific direction as to methods to be employed were both useless and impossible. The basis of success is individual treatment of the subject and patient study and experiment on the part of the artist. This is the path that the pioneer-artists in photography have followed—the path that every artist must follow.

He who would attain success as a photographer of children must possess the power to see into a child's mind; he must thoroughly understand and sympathise with it, and be, in short, a true lover of children. The various methods by which a stranger can win a child's confidence are well known. I may say that there are certain definite rules to be observed and adapted to the individual circumstances, all of which are amply elucidated in the special literature devoted to the subject.

A friendly word—a song, or simply musical sounds, repeated at intervals—these are some of the commonest methods employed. And when the artist perceives the child's face light up with a gleam of satisfaction, or express an attitude of intense mental concentration, he knows that the moment of psychological interest has arrived. But all the patience and effort in the world will not suffice of themselves, to produce the desired result; the artist must be well trained to read into the mind of a child, and must possess a considerable power of suggestion. As a certain writer wisely puts it, "he must succeed in gaining the child's confidence." Only when this is attained will he have entirely mastered his subject; and he will succeed in reproducing the life, feeling, character nay, that fundamental, palpating element itself which constitutes the inmost individuality of the child.

How manifold are the opportunities of study presented to him! The child in its mother's arms, in the cradle, at play in the grass—indeed, at all play which transplants the child into the wonder-world. There is a deep meaning underlying children's play; and it would be more correct to say that in reality children do not



MENDING-UP

JOSEPH BONANNO

play at all. So completely do they enter into the subject of their thoughts, be it a doll, a flower, a bird; be it suggested by sound or light or any other agent—that they never fail to preserve the reality of the situation. This fact in child-life it is which should supply the basis for the operations of an observant and discriminating photographer. It will supply him with all that is necessary, provided he sets to work simply; for a good pose is by no means the guaranty of a successful picture. The artist, too, must preserve his own individuality, while yet guarding against rigidity and solemnity of manner, both of which qualities may be useful in the photography of adults, but which are out of place here. He must beware of the mistake of treating the child as a grown-up person in miniature, and constantly bear in mind the fact that the child lives apart in a world of its own. Its thoughts yet dwell in the world of miracle whence he himself came, and the imprint of which he bears in his own personality.

At the present day, the want is keenly felt of faithful photographs illustrative of "the child's love of life." There are plenty of detailed representations of various aspects of child-study; unfortunately, however, these—especially when found in cotemporary journalistic and periodic literature—too often depict the little human animal instead of emphasising the soft and

appealing aspect of the child-nature. In other words, they proceed on the false educational principle of attempting to explain their weaknesses and faults—nay, even of defending and glorifying them.

How wide is the range of suggestions furnished by the nursery alone, both for the amateur and the professional! Could any parents desire a larger field for intercourse with their children, in which to occupy them, to guide their tastes and develop those traits which are essential for the shaping of character?

Man is bound by an infinite chain to the past of his race and of his own existence; and in this chain the child forms the link that connects the past with the future. He who would rise on wings of faith to free himself from the trammels of the past and to create new forms of life will gain strength to ascend only from his knowledge of what lies behind him. He must ever bear in mind that our idea of reality is foreign to a child, whose own reality, on the other hand, corresponds with the visions of our imagination, for the child is the greatest mystery of all and embodies all other mysteries.

This work requires no astral or psychological background. For freedom and simplicity alone may recognise true innocence—that strong, creative force in the economy of Nature.

Harringtons' Photographic Journal.



EDITORIAL



Maintaining the Standard

TO put forth one's uniformly best effort emanates from an innate desire to excel, to please one's self. It is, one might say, a natural instinct. It is generally associated with a feeling of pride—the pleasure of having accomplished something that is the result of conscious ability. If the achievement, whether daily, hourly or even less frequent, be intended for the gratification of others—be the motive altruistic or commercial—there comes to the producer the added feeling of sympathetic coöperation, and the hope that some one, the ultimate recipient, will be gratified. To be sure, there are periods of laxity, not necessarily of indifference or apathy, when, temporarily, the craftsmanship of the output is lowered in quality. When the cause is known, the workman or artist is judged accordingly. Generally speaking, however, there is the incentive in every normal person—whether he be an employer, employee or an independent artist—to execute his work in a creditable manner; not only that, but the ability to appreciate the executive superiority in others and an urgent desire to progress—to excel.

One thing is certain, that once a man's creative ability deteriorates—whatever the cause—he deteriorates with it, for it is a part of himself. How the ambition to gain distinction may be stimulated and encouraged, depends upon the individual. He should seek the companionship of persons who surpass him in ability, wisdom and experience; study the work of his superiors, and read standard works concerning his line of activity. In the case of a photographer, his course is well defined. He should acquaint himself with the productions of master-craftsmen; cultivate their society or, if inconvenient, exchange ideas through correspondence; take a course in art-instruction, and attend photographers' conventions. If he live in a city which has an active and progressive camera-club—such as exists in New York, Philadelphia and Chicago—he should join it and derive all the benefits it affords. It is gratifying to know that these, and other photographic societies, are conducted along highly educational lines, the source of emulation being, probably, the meetings of the Royal Photographic Society. However, it is desirable that, having reached a high artistic and technical

standard of performance, the photographer should not only strive to maintain it, but try in every possible way to surpass it. As competition is the life of trade, so should rivalry be the spirit of all artistic activity. The aim should be directed towards something beautiful, noble and inspiring that has not been expressed before. If the aspirant should fail to attain his ideal, he cannot but benefit by the effort.

The career of every artist has a beginning—his first manner of expression or interpretation. Many have but one style—a uniformly sustained individuality of interpretation and treatment. It is interesting to study the several periods of creative activity of such great artists as Raphael, in painting; Barrias, in sculpture, and Verdi, in music. Similarly, one may speak of the earlier and later styles of certain master-photographers. As a rule, the masters in painting and sculpture never permitted their artistry to deteriorate. Unfortunately, there are many well-known cases where musical artists—vocalists, in particular—were not wise enough to retire from public life at the zenith of their brilliant careers, but kept right on with failing executive powers until they reached the point where their musical performances gave pain instead of pleasure to their once ardent admirers.

Of the great craftsmen who glorified photography in the earlier days—Rocher, Sarony, Ryder, Gutekunst, Landy and others—none allowed his art to be lowered in quality. When Rocher photographed Pauline Lucca in several different positions, some admirers preferred the famous sitting one, others a profile or a front-view portrait; but no picture was inferior to another. Each of these five master-photographers maintained his individual, high standard to the last. The goal of every studio-photographer, photo-pictorialist and commercial specialist should be perfection, although that is rarely attained. Consummate craftsmanship, however, is within the reach of every serious and conscientious worker, for no true artist ever felt, or even asserted, that there was nothing left for him to learn. The feeling of discouragement never entered the breast of the really ambitious; for, like the youth, whom Lytton's *Ridicieu* sent on an important mission, they should remember that in the lexicon of youth there is no such word as "fail", and hope is ever young.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.

Second Prize: Value \$5.00.

Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface are not suitable for reproduction, and should be accompanied by smooth prints on P. O. P., or developing-paper having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces of fraction is sent with the data.*

4. *Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. **Be sure to state on the back of every print exactly for what competition it is intended.***

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Indoor Genres Competition

Closed December 31, 1920

First Prize: Bertran F. Hawley.

Second Prize: W. R. Bradford.

Third Prize: Charles T. Graves.

Honorable Mention: D. R. Battles; F. H. Chant; Dr. A. H. Cordier; Warren E. Crabtree; Thomas Farmer; Harry Footner; G. W. French; Ralph D. Hartman; Josephine U. Herrick; F. W. G. Moebus; Alexander Murray; Louis R. Murray; Harold B. Neal; Harry A. Pahl; John F. Roberts; H. B. Rudolph; Charles F. Smith; Henry A. Stanley; W. Stelcik; Elsa B. Versfelt; Paul Wierum.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.

"Home-Portraits." Closes February 28.

"Copying Works of Art." Closes March 31.

(Paintings and Statuary.)

"Home-Scenes" (Interior). Closes April 30.

"Street-Scenes." Closes May 31.

"Summer-Sports." Closes June 30.

"Summer-Flowers." Closes July 31.

"Shore-Scenes." Closes August 31.

"Outdoor-Genres." Closes September 30.

"Architectural Subjects." Closes October 31

"Domestic Pets." Closes November 30.

"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

IN deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Must Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know? Besides, the Editors are too busy with other matters to stop to write to the careless competitor for missing information.

This is often the reason why careless entrants wonder what has become of their prints.



LIGHTING-UP

BERTRAM F. HAWLEY

FIRST PRIZE—INDOOR-GENRES

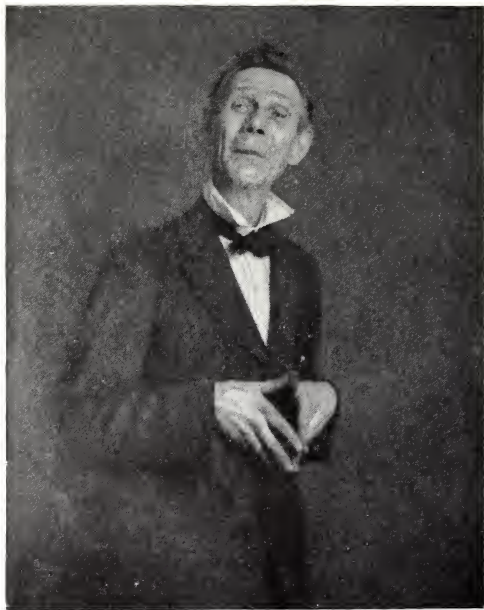
Some Camera-Fittings

ALTHOUGH a vast amount of ingenuity has been expended upon the design of small cameras for amateur use there has been but little progress in the direction of cameras for serious professional work for many years. It is a curious fact that there has hardly been a British camera-maker of the first class who was a practical photographer, comments *The British Journal*, and, in addition, most camera-makers seem to have a rooted objection to introducing innovations of any kind. It will hardly be credited, but it actually occurred, that we were once told that if a certain camera was to be made without a cross front an extra charge would be made, as it was a departure from the standard pattern.

In the design of many cameras too much consideration has been given to weight; the tendency has been to lighten both wood and brass-work to a point at which both durability and rigidity have been endangered. Portability is a good thing in its way, but if it has to be purchased at the risk of even the occasional loss of a valuable negative, the bargain is a bad one. Our own preference is for a solidly-built instrument

of the parallel-bellows type, which the late George Hare introduced in its most approved type, but good as it is there are points in which considerable improvement is desirable. In some cases it is possible to make this with existing instruments, so that if an obliging camera-maker can be found the task is not a difficult one.

The most serious shortcoming in this type is the limited range of movement permitted in swinging the back. With difficult architectural subjects, it will sometimes be found that when the necessary tilt has been given it is impossible to bring the back into the vertical position, even when the lens has been raised to the utmost. This defect can be removed by making both the central pivot-plate and the slotted clamping-plates much longer. Usually they are recessed into the front frame, but they may easily be made to project beyond the actual woodwork of the front and to fit, if necessary, into recesses in the camera-case. The rising-front is usually limited to an unnecessary extent in its range. With the older types of lenses this was of secondary importance, as dark corners usually appeared with a small displacement of the front; but with the greatly-improved covering-power of the



"MR. PECKSNIFF"

W. R. BRADFORD

anastigmats the fullest range is necessary, and this can usually be obtained by cutting away the inner frame to which the bellows is glued, so that the upper edge of the lens comes in a line with the bellows. After doing this, it may be necessary to provide a slip of wood, rebated to fit the lower edge of the front, so as to prevent light from entering the camera. An ingenious operator of our acquaintance fitted a roller-blind extension to the bottom of his rising-front for this purpose. A similar cutting-out of the lower edge of the inner frame may be found useful if a great downward movement of the lens is needed. If this be done it is a good plan to have an additional slot cut on the other side of the rising-front so that this can be reversed in its grooves.

Another little convenience not always provided is a second bush for the tripod-screw, so placed that the camera is evenly balanced when the bellows is fully extended. This is especially valuable when using telephoto-lenses or the single components of convertible anastigmats.

Although between-lens shutters are usually fitted to lenses of moderate size, they are not available for $6\frac{1}{2} \times 8\frac{1}{2}$ and larger lenses, and therefore the selection of a suitable shutter calls for a little consideration.

As a rule, the roller-blind type will be found satisfactory, and it is convenient to have it fixed to the camera-front, the lenses being fitted to loose panels. This leaves little to be desired with lenses of comparatively small angle, although even with these it is necessary to see that when the front is raised to the utmost, no part of the field is cut off. In several cases where defective covering-power is alleged, the trouble has been due to the smallness of aperture in the shutter, and not to the lens. When using wide-angle lenses it is desirable to have them fitted directly to the camera-front and to avoid the use of any shutter, except one of the between-lens type.

A fitting which is seldom found in the ordinary professional outfit is an efficient lens-hood or sky-shade. This is such a very useful adjunct that such neglect is amazing. A good sky-shade permits clean negatives being made in positions which would otherwise be impossible. Perhaps, for ordinary work, the best form is a simple flap attached to the front of the camera, which can be fixed in any position without interfering with the use of the flap. Tubular lens-hoods, unless lined with a non-reflecting material, such as black or dark green velvet, are liable to reflect light from their lower portion, but a flap is free of this objection. With



"GOOD-MORNING!"

CHARLES T. GRAVES

such objects as monuments situated below a brightly-lighted window the sky-shade is invaluable as it is to cut off the direct rays of the sun when working against the light.

One more fitting, not so generally used as it might be, is a repeating-back, to adapt an outdoor-camera for studio-work. This consists of a frame similar to that of a studio-camera, made to fit into the opening provided for the reversing-back. Into this, the ordinary plateholders are fitted with notches for centering two plates opposite the lens. A 10 x 12 square-bellows camera can thus be converted to take two $4\frac{3}{4} \times 6\frac{1}{2}$ plates side by side or a single whole plate, as needed, while 10 x 12 groups or panels are made by using the ordinary back. This hint may be useful to those who wish to make one good camera answer for many purposes.

Pre-Sulphiding

ALTHOUGH the practice has been repeatedly advocated, notably by the Rajar Company, comparatively few bromide-printers seem to be aware of the advantage of a preliminary treatment in a sulphide-of-soda bath for bromide-prints which are not strong enough to yield good sepia-tones by the ordinary method, says *The British Journal*. There appears to be a little misconception as to its action, and in one instance we found the process condemned as useless because no apparent change occurred in the print before bleaching.

We would suggest that any one who wishes to make a test should cut a print in half, immerse one half in the ordinary sulphide-solution for five minutes, wash well, then bleach and sulphide as usual with the remaining half, and other prints if desired. When dried, the pre-sulphided half will be found to be appreciably cooler in tone and more brilliant than the others. Although it is, of course, desirable that prints should be made of sufficient strength to tone satisfactorily in the ordinary way, it is not always possible to do so if the negatives are lacking in contrast, and in such cases the preliminary bath will be found useful. With some papers a similar result can be obtained with the single bath of liver of sulphur; but other brands will only tone to a purple by this method.



Thank You!

ROME, N.Y., Aug. 2, 1920.

Dear Mr. French:

PHOTO-ERA gives me pleasure each month, as usual, and you deserve much credit for maintaining its high tone. No more artistic-looking magazine is published.

Yours faithfully,

F. B. HODGES.



SUBJECT FOR NEXT COMPETITION
ADVANCED WORKERS



"A QUIET GAME"

MABEL HEIST BICKLE

**Advanced Competition—Home-Scenes
(Interior)**

Closes April 30, 1921

WE have had competitions devoted to outdoor-genres, indoor-genres and home-portraits. All of these have had something to do, directly with the home and life in and about it. Now, we are to deal directly with home-scenes; and therein lies an exceptional photographic opportunity. We all remember the beautiful song, "Home, Sweet Home," and the concluding line, "there's no place like home." Without a doubt, to most of us home is the shelter of all that we hold dear. To visualise photographically our feelings with regard to home-scenes and to express pictorially the deep, sweet sentiment that surrounds the "dearest spot in all the world" is at once a task and an inspiration.

The making of a good home-scene requires a practical knowledge of portraiture, indoor-genre and interior-photography. Although this trio of requirements may appear to be rather formidable, let me say that the success of our competitions within the last

few months is ample proof that our subscribers and friends are quite able to make this competition a success. I doubt that any competition, recently, has had the appeal that the present one should have. The normal home, with its father, mother, children, grandfather and grandmother is the center—or should be—of the best in our lives, and to express photographically the love of home and those in it, is eminently worthwhile.

At the outset, the camerist should note that a home-scene is not necessarily a home-portrait. The emphasis in this competition should be placed on the home rather than upon a person. If it is the habit of father to sit by the sitting-room lamp, read the evening-paper and smoke his pipe, a picture of him as the center of interest would result in an indoor-genre. However, if the photographer shows him as already described and, in addition, a large part of the sitting-room, with, perhaps, mother knitting in another part of the room, we have a subject which approaches the requirements of this competition. Obviously, there should be no apparent artificiality about such a picture. There should be no tenseness or "frozen" attitude on

the part of any persons that are included in the picture. To this end, daylight—or a combination of daylight and artificial light—is of advantage. A flashlamp is a valuable accessory to possess and to use.

The example that we have selected is one that could be improved in certain respects; but I venture to say that for natural, easy pose and expression the figures are well rendered and enough of the room is included to make the picture a home-scene. Although the center of interest is the card-game, nevertheless, the eye wanders about the room and rests here and there to look at the books and pictures on the wall. This is what we would do were we one of those present. The picture is a suggestion—not a model.

It should not be assumed from the preceding paragraph that a home-scene must include one or more persons. A well-arranged picture of the library, dining-room or parlor is acceptable to the jury. A good photograph of the living-room, provided that it is not "all fixed up" for the occasion, is just as much a home-scene as if the entire family were included. In fact, this competition was designed to bring out, photographically, what a home-scene really is in the opinion of thoughtful workers. No doubt, opinions will differ and it will be of keen interest to all to study the results. Some will place the emphasis upon persons amid home-surroundings, and others will decide in favor of the home itself without the human element. There are many of us who believe that home is not home without our loved ones about us; but there are those whose experiences in life lead them to feel that a cosy, well-lighted, cheerful room is just as much a real home. Hence it may seem that the photographic and artistic opportunities in this competition are very great.

A good home-scene may be made with almost any camera that has a fair lens and is light-tight. Virtually, each exposure must be a time-exposure; and this places the moderate-priced equipment on an equal footing with the more expensive outfits in that respect. However, when it comes to the length of exposure, that is another matter. The camera that is equipped with an anastigmat lens enables one to make shorter time-exposures; and, in many cases, to eliminate the need of artificial light except at night. Although good home-scenes may be made with the most humble of box-cameras; nevertheless, a camera that is fitted with a groundglass or, better still, a reflecting-mirror has a great advantage. In the days before exposure-meters were used as much as they are now, the experienced photographer depended upon the image of the groundglass to show him the strength of light that was transmitted at various stops by the lens. In making interiors, this old-time method is still of value. There can be no question about it; the photographer can see positively the exact amount of illumination that reaches the plate, and upon this visible proof he can determine the proper stop to use and the correct exposure. The same thing may be said of the reflecting-camera with its mirror which transmits the light from the lens, right-side up, on the groundglass. Therefore, whenever it is possible, or convenient, the worker will do well to use a camera that has a groundglass.

In apparent disregard of the preceding suggestion, let me say that the many vest-pocket cameras fitted with high-grade anastigmat lenses, now to be obtained, will make remarkable interior-photographs. The short-focus lenses and large apertures are of distinct aid to the worker who has neither the time nor the inclination to make extensive preparations for this competition. Although the Editors of PHOTO-ERA

MAGAZINE do not encourage haphazard or careless workmanship, nevertheless, they too are busy men and know that all the subscribers and readers of the magazine cannot go into the preparation of competition-pictures as much as each would like to do. Hence, although a camera with a groundglass is to be advised, the vest-pocket or hand-camera manipulated by an intelligent worker is quite able to yield a prize-winning picture. Rather than have a subscriber or reader stay out because he did not have or could not get the specified outfit, we prefer to say, "Use the camera you have; do the very best you can with it and be sure to enter a picture in this competition. We want you with us; so don't let a little matter of this or that camera deter you one moment. To enter the competition, no matter with what camera the picture was made, is of greater practical value to you than to stay out altogether!"

Perhaps, I may be pardoned for a moment's digression. What I wish to say is that the amateur or professional photographer who is always *going* to do something remarkable whenever he does obtain the right lens and the right camera, *never accomplishes anything*. It is the camerist who can make a creditable portrait with a Brownie camera that will win salon-honors when he gets a complete portrait-outfit. Say what you will, each one of us must creep before he can walk, photographically. The most expensive outfit in the world will not enable me to make a good picture. It is what I can make it do for me that really counts—not the name or price of the outfit. If we had all waited to make pictures until we could have bought reflecting-cameras, how many of us would be making pictures to-day?

Much of the success in making a home-scene lies in careful preliminary planning. It is amazing to note the number of possible excellent pictures that are marred by evidences of careless planning. It is not too much to devote an entire evening to the making of one or two creditable home-scenes. This matter of making pictures as quickly as the camera can be filled with fresh plates or films is expensive and non-productive photographically or artistically. In short, it is better to try to do it right or not at all. It would seem to me that any worker, no matter how limited his knowledge and equipment may be, can do no less than his very best. That done, he can look any man in the eye fearlessly. Some may remark, "Why so much emphasis on this point? Photography isn't so serious a matter." Perhaps not, to some; but there are many of us who learn through the hard school of practical experience that something can never be made from nothing. No one can make good pictures without being willing to give the requisite time and attention. It simply cannot be done. The making of home-scenes with a box-camera or a complete portrait-outfit requires effort, thought and time to attain results. This is true of every competition and of every good picture. Those who think otherwise are at liberty to make the attempt.

Without a doubt, these competitions have brought to light some of the best work done by careful workers in the United States, Canada and Europe. We are eager always to encourage our subscribers and readers to make the most of photography; and to that end, we try to make these competitions a stepping-stone to greater achievement, pleasure and benefit. Our efforts are appreciated, as many unsolicited letters attest; but the real satisfaction is in that we, as one large family, strive together to get the most out of the art and science of photography.

A. H. B.



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.



Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper are not suitable for reproduction, and should be accompanied by smooth prints on P.O.P., or developing paper having the same gradations and detail.

5. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.*

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. *Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.*

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition

First Prize: George R. Taylor.

Second Prize: John J. Griffiths.

Honorable Mention: R. H. Addison.

The Beginner and Photo-House-Cleaning

A GOOD photographic house-cleaning is a mental and a physical performance. To be of lasting benefit, it must be done thoroughly and intelligently. In the spring, the efficient housewife turns things topsy-turvy, to the end that her home may be fresh and clean for the summer-season. The beginner may well emulate the example of the housewife.

In most cases, the newcomer in photography does not possess an extensive equipment; hence he is not obliged to do so much physical as mental photographic house-cleaning. It may not be apparent to the average beginner; but it is true that there are as many isms in photography as there are in other human activities, and the beginner must take care that he maintain an even keel amid the many contrary winds and waves that are aroused by radical or ultra-conservative photographers. There are those who extol the soft-focus picture and those that insist upon "wiry" definition. There are those who contend that the landscape is the true picture and those who maintain, as strongly, that the portrait represents the highest form of art. Finally, there are others who cannot decide at all wherein lies the best photographic expression. Thus—to mention but a few isms—the beginner may see that he must clean his mental photographic house thoroughly in order to determine accurately his own position.

It is well for the beginner to listen and to read; but he should make his own photographic decisions. I remember an amateur of my acquaintance who was blessed with the time and the money to devote his entire energies to photography. However, he was not a success. He would not give his mental photographic house a cleaning. He listened first to this one and to that one; he bought first this lens and that; he had a dozen cameras and an elaborate darkroom-equipment; but, with it all, he never had a picture published or received a prize. He was buffeted from pillar to post because he did not stand squarely upon his own photographic feet and make a decision to succeed in one definite direction. His mind was filled to bewilderment with the theories and experiences of others, and these he permitted to control his career to his photographic ruin. Unfortunately, this same man continues to aver that if he had the right lens and the right camera, he would make the judges at the salons "sit up and take notice!"

The intelligent purchaser of an automobile will gather catalogs and information from the four winds; but when he signs his cheque, he is convinced that so-and-so's car is the best and he is willing to back up his decision with his money. The beginner should look upon photography in somewhat the same manner. He should gather all available data from the experience of others and his own; and then choose the branch of photography that he is best fitted to pursue with



THE OLD BRIDGE

GEORGE R. TAYLOR

FIRST PRIZE—BEGINNERS' COMPETITION

pleasure and benefit. The mental photographic house-cleaning is needed to clear the way to true progress and success.

Not very long ago, a beginner brought me several dozen prints which he wished me to inspect and criticise. I was amazed at the artistic judgment that the beginner displayed with regard to composition and lighting. Virtually, every print was an example of well-arranged subject-material. However, the technical work was unspeakable. There were spots, stains, pinholes and finger-marks on prints and negatives. Investigation brought to light a small darkroom that was ill-smelling, littered with photographic debris and dirt. Small wonder that the prints and negatives were spotted and stained! This beginner's equipment needed a physical rather than a mental photographic house-cleaning. How strange that a man with a keen artistic sense should mar his ability by carelessness or indifference. Many an advanced worker is striving eagerly to cultivate the very artistic sense that this beginner possessed, but ruined by neglecting to clean house photographically.

Perhaps these few remarks are not applicable to

every reader; and, if so, I have a word to say in general. Whatever the beginner's mental and physical photographic equipment may be, it should be a duty—and a pleasant one—for him to lay his plans for an active photographic season. He should look over his outfit and eliminate all "dead wood" so that he may begin the summer of 1921 in an effective manner to obtain results. As I have said many times, it is the *successful* amateur-photographer who enjoys and makes the most of photography. Any task becomes a pleasure, provided that we enjoy it and are able to master each difficulty as it appears. True strength is mental as well as physical; and, photographically, this means intelligent reading, study, assimilation of ideas and an adequate technical photo-equipment. The photographic magazines, textbooks and catalogs supply the needed mental preparation, and modern photo-apparatus offers the intelligent beginner every opportunity. Hence, let every ambitious beginner make the most of his photographic house-cleaning, to the end that the spring and summer of 1921 will become memorable in his photographic career.

A. H. B.



A LAUGH AND A SMILE JOHN J. GRIFFITHS

Fog and Mist

At this season of the year the landscape-worker finds that many of his subjects are made much easier than at other seasons, owing to mist in the atmosphere, which by subduing the background and softening its contrasts, helps to emphasise the nearer parts, where, in almost all cases, the main interest will be found to lie. There is no need to tell the old worker, continues *The Amateur Photographer*, but it may be helpful to the beginner to point out that there is all the difference in the world between a photograph of some natural subject in which the more distant parts are veiled by mist, and a "foggy" result brought about by imperfect technique. One hears a beautiful mist effect referred to so often as if it were the result of some lack of care and skill on the part of the photographer, that it is evident that the fundamental differences between the two are not realised. A "fogged" result, using the word in its photographic sense, is one in which the contrasts generally have been lessened by some unintentional action of light or of the chemicals employed. Manifestly such action cannot be exercised differentially, masking the more distant planes and having little or no effect upon those near at hand; it must go over the picture, or the particular part of it that is affected, quite irrespective of the distance from the camera of the objects delineated. Its only result,

therefore, is a falsification, which the practised eye detects at a glance, and which can have no pictorial justification at any time. Natural atmosphere, on the other hand, is essentially selective; it softens contrasts in the most distant objects more than in those which are nearer, and those which are close at hand are hardly perceptibly affected. It should be remembered also that to obtain this effect, a negative which suffers from photographic "fog" is quite useless.

A Tripod of Novel Design

THE *Photographic Dealer* describes a metal tripod of novel design and practical character, the product of a well-known Paris manufacturer of telescopic metal-tripods. In this new tripod, the sections are neither round nor triangular, but U-shaped. Instead of drawing out, they are hinged, folding snugly inside one another. To open, the leg is raised, the next section then unfolds and, when this is in alignment with the first section, clips firmly into position by a reliable spring clip—this action is continued until the tripod is fully extended, a matter occupying only a few seconds. To close the stand, the reverse action is adopted, the smaller section being folded into the next larger one, until completely shut. The tripod is well constructed, is very rigid, and folds into the same space, and weighs approximately the same, as a brass tubular tripod.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



The Flames of Pure and of Wood Alcohol

A WELL-KNOWN chemical authority, Arthur D. Little, states that wood-alcohol may be distinguished from grain-alcohol by burning in an alcohol-lamp; that wood-alcohol burns with a yellow flame and pure grain-alcohol with a blue one.

He also states that, not only is this flame-test, so-called, utterly unreliable as a means of differentiation between these two kinds of alcohol—because of the varying influence upon the flame of the substance, other than alcohol, commonly present in alcoholic beverages or commercial alcohols—but when one is dealing with the pure alcohols, the appearance of the flames is the exact reverse of that stated first in this paragraph. Pure wood-alcohol burns with a blue flame, whereas the flame of pure grain-alcohol is tinged with yellow. In the interests of public safety, it is well to emphasise the fact that no simple test is known by which the presence or absence of wood-alcohol may be established.

Apparatus for Producing Colored Kinematograph Pictures

THIS invention relates to the lens for color-kinematography, according to the process by which each of three part-objectives is coordinated with three part-color fields. The objective consists of an ordinary exterior lens which produces a first real or virtual image (upon exposure). This image is reproduced by the second series consisting of three separate lenses arranged side by side in tubes, on three separate fields of the light-sensitive coating.

Patent specification: Apparatus for producing photographic part-pictures arranged alongside of one another in the same plane; for making photographic or projecting kinematographic or fixed-color pictures, for which purpose one exterior objective is coordinated with three interior lenses, one for each of the color-parts, so distinguished that the three part-objectives are not placed in one another but one alongside of the other. (German, Patent No. 324,547, of May 30, 1913, with French priority of July 27, 1912, to Maurice Audibert, Villeurbanne, France.)

New Reversing-Spectacles

AN instrument that will put the image on the ground-glass of a camera in an upright position has long been sought by camera-users. The *Photographische Rundschau* describes one as follows: The mirror-reflex-camera must be considered as a successful invention. It was based, however, on quite different motives. It was designed to watch the object to be photographed in the image depicted on the groundglass, up to the moment of exposure. This made necessary a quickly removable mirror which would at the same time bring the image into the upright position. It is, perhaps, easy to understand that if one can watch the subject and seize the most favorable moment for exposure, the resulting picture may be preferable to others. This result, however, will be due to the circumstance that the subject was visible in an upright position and

the direction of the lines could be seen to better advantage—that is, in their usual natural positions to which our eyes are accustomed—than in one where the image is inverted. In the latter case a correct judgment of the lines is completely excluded and our eyes are more receptive to the color. Only by long practice can one recognise the leading lines in an inverted image. Since our white-and-black pictures lack color, we can produce artistic pictures only by a skilful distribution of light and shadows, and a correct direction of the lines. In such a case, a wood-carver would doubly accentuate his lines because he has not the help of color. But this charming inverted image on the groundglass often misleads us into making a picture which, when finished, can perhaps no longer be called charming. How can that be remedied? I will gladly give the answer to that question to every photographer who has not a mirror-reflex-camera.

This inverted groundglass picture has also given me no end of trouble, so I always examined it in upright position by means of my pocket-mirror; but I can say at once that this way is rather inconvenient, for the ordinary mortal has only two hands which the photographer must keep fully occupied in operations other than holding a pocket-mirror before the groundglass; so there was nothing left for me to do but to render the mirror independent of the hands by arranging it in the form of a pair of spectacles and set them on my nose. This is a solution which, for simplicity, leaves nothing to be desired. Yet it has several other advantages besides those mentioned; for they also save plates, since with their aid we can—as in artistic views and all others—eliminate disturbing and disfiguring lines which often are apt to change a desirable effect into the opposite, and, besides, they are not so easily overlooked when the view is erect. How many negatives can be picked out in the course of a year that may be technically perfect yet are artistically faulty! And just at present, when the real amateur must economise in the use of photo-materials, a faulty exposure becomes doubly painful. Therefore, all plate-savers are timely. Moreover, these spectacles do away with the tiresome stooping position of the photographer when working with a tripod that is too low. As they do not interfere with the rays between the object and the plate, they cannot affect the image. It is also not to be undervalued that absolutely no change is necessary in the camera itself, and the spectacles can be used with any camera that has a groundglass for focusing.

The spectacles are worn the same as any other kind and are raised or lowered on the nose till one's own eyes are not reflected in them. Their form corresponds to the most favorable passage of the rays from the groundglass to the eyes. One can look over the upper edge so that other work can be done without removing them. In short, long-sighted persons can keep their ordinary glasses on without inconvenience. In focusing, the head is inclined until the image on the groundglass is visible in the spectacles. After a single trial one can use them perfectly. Other operations at the camera are not affected in the least and both hands are free as before. These spectacles have been patented by Wilhelm Schlasitz, Essen, Germany.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

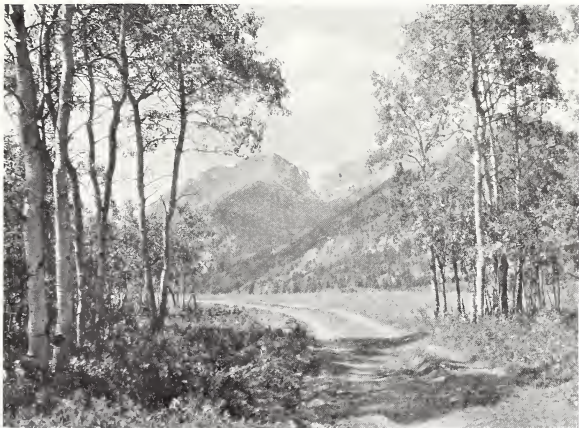
Among the many excellences of this picture may be mentioned the graceful lines of the trees, the pleasing pattern of the foreground herbage and shadow, and the fine sky-effect. Although the mountains are good, we might wish for a better suggestion of remoteness; he can merely take advantage of haze, which Colorado is said seldom to afford. The only feature which could be called bad is the road. One object to being carried "willy-nilly" out of the picture at the left, he wants to go up into the mountains. Although this, too, was perhaps beyond the photographer's control, a viewpoint to the right would probably have brought the termination of the visible curve nearer the center. The resulting increase in size of the group of trees at the left would not have destroyed balance.

BERT LEACH.

With ample material at hand for a beautiful composition, it is regrettable that more care was not used in choosing the viewpoint; especially, when it is evident that, moving the camera only a few feet, would have made possible a pictorial masterpiece. Just take a step or two ahead and possibly a bit to the right. This will omit the objectionable tree-trunks at the left, and allow the foreground to be more in shadow. Then, it is well to make a little less of the group of trees at the right to better balance the larger group opposite—they are too nearly equal. Now, with no strong highlights in the immediate foreground, the eye naturally follows the pleasingly curved roadway into the inviting beauty of the distant mountains.

BERTRAN F. HAWLEY.

If the artist had thought to make a straight print of this scene, he would have had a rather delightful success, though a long-focus lens would have shown better perspective. The two clumps of trees balance nicely and that to the right is delicious, because natural. But I can't figure out why those two birch-trees to the left are so dark except on one edge. The lighting gives



THE PICTURE CRITICISED THIS MONTH

one the impression that the sun must have been low to produce such an effect. Yet the shadows across the road show that the sun was at about 60 degrees from the horizon. And those road-shadows are just a shade too heavy to be exactly natural, I should say. But the mountains and the clouds in the background look like nothing I have ever seen, and I was raised among mountains in New Hampshire and have lived in the mountains of Mexico and the western part of the United States. Whence comes that bright white edge on that mountain to the left? And how in the world did the sun, in the position we must infer it was—judging from the road-shadows—produce those dark spots in that cloud? Or did any one ever see a cloud against a mountain in the distance leaving a bright white line where land and mist meet? I am reluctantly compelled to believe that some amateur has been using a knife on the trees at the left and a pencil on the mountains in the background and has printed in a cloud with lighting that does not fit the position of the sun. It's a pity; the scene was charming before he undertook to improve on Nature.

E. L. C. MORSE.

THIS is a very pretty bit of landscape. Certainly no criticism can be made of the result obtained. The question then is regarding the composition. It is unfortunate that the artist should have chosen such a "rubber-stamp" composition from the wonderful scenery before him. A better composition might have been obtained had the road been sacrificed for more sky, and a more careful pattern of the tree-tops against the sky. However, the picture is very pleasing as it is.

CHARLES T. COINER.

THE "appealing pictorial beauty" of which the Editor speaks is really the most striking feature of the print. That feature of the picture to which I should

give second vote is the remarkable detail of light and shadow. Why, one can see the notches in the bark of the most distant trees! If it is possible for a photographic composition to err on the side of too much perfection, this picture commits that error in the matter of too perfect a balance. For the beauty of this particular picture, it would be a happier distribution of things if Nature—or man—had planted at just this spot, the group of trees at one side of the road, and a cluster of bushes on the other side. The background of graceful mountain-line and cloud is highly admirable. The final impression left on me is that I should like to be able to see what is there just around the bend.

Y. BILLY RUBIN.

FINE material rendered with unusual technical excellence, but the composition is weakened by a common fault, viz. scattered interest. As it stands, one's attention is divided between the nearby tree-groups and the distant mountains. To hold attention upon nearby parts, some one tree or group (such as the double tree-trunks in the left center of the composition) should have been given a more prominent place, and a day chosen when the distance was partly veiled in mist. Taking the print as it is, interest could be centered upon the really beautiful vista of mountains seen between the two groups of trees by trimming off half-an-inch from the left, and three-quarters-of-an-inch from the right-hand side, making a vertical composition showing only enough nearby foliage to frame—in the distance. The cast shadows in the foreground help the aerial perspective greatly, but the strip of sunlit grass shown along the bottom margin should either be lowered in tone or removed by trimming away three-sixteenths-of-an-inch, since it hinders the eye from passing readily into the picture.

WILLIAM S. DAVIS.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



THOUGH the weather was chilly when the owner of "Her Smile"—front-cover and page 125—which greets the photographer from the dealer's display-window and the counter, sat for her picture, the expression is warm and radiant. The picture harmonises with the article on the child in photography, page 139; for there the student in child-photography will find many valuable ideas with regard to the approach and treatment of the little ones when before the camera. By looking at "Her Smile," one feels that "the moment of psychological interest has arrived." One can then admire the photographer's skill in producing this delightful portrait. The graceful line from the head, past the dimpled hand to the foot, will not escape the eye of the critical observer. Although the prevailing tone is white, there are pleasing gradations and adequate detail.

Data: Professional studio, Boston; December; 8 x 10 Century; 16½-inch Goerz; used at full opening; less than ½ second; Portrait-Film; Artura contact-print.

Paul W. Bartlett, the American sculptor, has endeared himself to his countrymen by the noble equestrian statues he has modeled of General La Fayette, which, when cast in bronze, will be erected in the city of Metz in Alsace. This work of art will be presented by the Knights of Columbus, and unveiled August 21 by Marshal Foch, who, on his own behalf, and at the same time, will receive a jeweled baton. Mr. Bartlett is also the author of a similar statue of General La Fayette which stands in the Place du Carrousel, and which is admired by all Americans who visit Paris. This monument was presented in 1900 by the school-children of the United States in memory of La Fayette's share in the American War of Independence. The portrait of sculptor Bartlett forms the frontispiece of this number, and is an excellent likeness. It is the work of the leading professional photographer of Portland, Maine, H. M. Hanson, who is also a former president of the Photographers Association of New England. Data: 5 x 7 portrait-camera; 16-inch Dallmeyer 3 A; at full opening; negative enlarged with Verito lens.

"We have again with us, the guest of the evening, Mr. Herbert B. Turner—photographer, traveler and writer. He will entertain you with a talk on Algeria and Tunisia, which countries he has visited, not long ago, having also photographed their salient points of interest. His pictures you will find attractive and educational—rather more interesting than what can be purchased or what the average tourist-camerist brings home. Ladies and gentlemen, it gives me great pleasure to present Mr. Turner!"

The traveler, mentioned above, will be found—presented for the first time, and with all necessary photographic data—on pages 113 to 123.

The dainty winter-scene, page 126, is by the leading professional photographer of Bar Harbor, Maine, whose beautiful work, made outside his studio, is well known to our readers. The view-point, here, has been chosen with excellent judgment. The favoring light throws desirable shadows across the road, giving a foreground of pleasing interest. Data: January, 9 A.M.; 5 x 7 Korona; 7-inch Goerz; stop, F/16;

sunlight; 1/25 second; Portrait-Film; pyro-soda; Azo E. Hard.

It's quite a leap from Mount Desert to the Valley of Lauterbrunnen, for in this region the Cadby's spend mid-winter, every year. This locality abounds in beautiful snow-clad scenery, of which the view by Will A. Cadby, on page 129, is an example. This versatile master-photographer is equally successful in his portrait-studio, and his native out-of-doors, as he is in the Swiss Alps. His "Off the Beaten Track," despite Victor's magnificent transformation, looks very familiar to the Editor, who made a camera-tour to this locality, in 1909, taking the train from Interlaken, and walking up the hillside from the station of Lauterbrunnen. On the right is what appears to be the slope of the village of Mürren, the headquarters of winter-visitors including the Cadbys, and, beyond, a peak of the Breithorn range—west of the Jungfrau group. The foreground is a rhapsody of silvery tones, with a delightful melody—shall it be called?—making a charming entrance, passing gracefully by the observer and disappearing beyond the beautiful, snow-invested tree at the left. It must be a source of satisfaction to Mr. Cadby to know that he has created here a winter-picture of sensational beauty, superb pictorial composition and rare virtuosity. Data: "Off the Beaten Track"; Swiss Alps; 5 x 7 Imperial Non-Filter Plate; from a series of illustrations on Alpine Photography in the "Imperial Handbook," Season 1920; half-tone-block lent by the Imperial Dry-Plate Co., Ltd., London.

The prints selected by the Editors to show the artistic and technical qualities of the collection of pictures submitted by Dr. Wightman, president of the Kodak Park Camera Club, Rochester, N.Y., have already been passed upon by a local jury; consequently, it seems best to make no special comment in this department. Nevertheless, the Editor cannot refrain from according a word of praise to the fine artistic judgment displayed by the authors of "The Gorge," page 133, "The Brook in Winter," page 136 and others.

The data of these subjects are as follows:

"Playing at Seining"—Braddock's Bay near Rochester, N.Y.; July, 4 P.M.; bright sunlight; 4 x 5 Speed Graphic; 6-inch Goerz Dagor; stop, U. S. 8; K-2 ray-filter; 1/35 second; Speed Film-Pack; pyro; Arturo Iris E. "A Break in the Clouds"—Blue Mt. Lake, Adirondack Mts.; August, 5 P.M.; bright; 3¼ x 5½ 3A Kodak; F/7.7 lens; stop, F/16; sky-filter; 1/50 second; Eastman N. C. film; pyro; Iris Artura. "The Gorge"—Maine Coast; July, 4 P.M.; good light; 5 x 7 view-camera; 11-inch F/5.6 lens; stop, F/16; 1/25 second; Ortho. plate; pyro; Artura. "Have Some?"—September, 1 P.M.; bright day; 3¼ x 4½ No. 3 Brownie; rapid rectilinear lens; U. S. 4; 1/25 second; Eastman N. C. film; pyro; bromide enlargement. "Poster-Design"—May, 10 A.M.; bright; 5 x 7 Graphic; 11-inch F/5.6 lens; stop, F/16; 2 seconds; Seed 30; pyro; Artura Iris C. "The Brook in Winter"—January, 2.30 P.M.; bright sun; 5 x 7 Seneca camera; 12-inch rapid rectilinear lens; stop, F/16; 1/25 second; film; pyro; bromide. "A Portico"—July, 11 A.M.; sunshine; No. 3 Kodak;

rapid rectilinear lens; stop, F/8; 1/25 second; pyro; Artura Iris.

Among the striking prints that received Honorable Mention in the Advanced Workers' competition, retained by PHOTO-ERA for possible future publication, is one by Joseph Coburn Smith, "To the Rescue!" honored in the "Domestic Pets" competition, November, 1919. It passed through the Editor's hands several times, during the past year; but no opportunity to utilize it seemed to present itself. Impressed by an article in praise of man's best friend, that was quoted by the *Boston Transcript*, recently, the Editor recalled at once Mr. Smith's touching picture, and decided to publish it together with the article from the *Baltimore American*, Page 138.

Data: Made at Atteau Lake, Maine; July, 3 P.M.; bright sun; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; B & L Tessar Ic; 1/350 second; stop, F/6.3; Wellington Anti-Screen plate; tank; enlarged on P. M. C. No. 6.

The pictorial representation of real or simulated unconsciousness of the presence of the artist, was never better illustrated than in Joseph Bonanno's genre-group, "Mending-up," page 140. If the child, with its back to the camera, were a good-looking woman in the group, it would be something out of the ordinary if she remained placidly with face averted; for in any group of this sort—particularly, on the stage or in motion-pictures—the chief actors are lined up or grouped in such a way that they face the audience. There would never be an exemplification of self-sacrifice as shown in Mr. Bonanno's picture. Moreover, there can hardly be a really artistic group, or one in which the participants or actors are surprised by the artist or by the camera, so that they have not time to arrange themselves in order to avoid the concealment of their faces. The group in "Mending-up" is very effective in its naturalness, as must be obvious to any one who appreciates good art in grouping. The setting of the picture, particularly the background, is also very happy; and Mr. Bonanno is to be congratulated upon his unusual artistic success. Data: August, 11 A.M.; bright light; 1/25 second; 4 x 5 Century Camera; 10-inch R. R. Lens; stop, U. S. 2 (rear part of an old Darlot Lens); 4 x 5 Seed L. Ortho plate; A. B. C. pyro, in tray; enlarged on Eastman P. M. C. No. 2.

Advanced Workers' Competition

WE are indebted to Bertran F. Hawley, winner of the first prize in the Indoor-Genres competition, for entering so interesting an interpretation of the subject as "Lighting-up," page 143. It is only in logging- or hunting-camps that such a scene as this is possible, and free of any artificial arrangement or preparation. The position is natural and harmonious in every way and, although there are several accessories in the picture—but none too many—they do not detract from the camper's face and action, for there the interest is centered. Data: Mr. Hawley's hunting-camp in northern Ontario; November, 1920; noon, on a very dark and stormy day, which imparted very little natural light to the camp; 4 x 5 Century Camera; $6\frac{1}{4}$ -inch Dallmeyer Stigmatic lens, series 2, F. 6; stop used, F. 8; 4 x 5 Hammer Ortho.; pyro-acetone; illumination, flashlight; negative enlarged on Wellington Bromide Cream Chamois; developed in Amidol; Sepia-toned by the sulphide process.

Among the truly versatile masters in amateur-photography is W. R. Bradford, who, while a professional cartoonist and attached to one of the largest American newspapers, finds solace, diversion and pleasure in the use of the camera. Readers of PHOTO-ERA MAGAZINE are familiar with the intelligent appli-

cation of his skill and practical knowledge of the principles of art, as exemplified in indoor-genres, still-lives and street-scenes. His masterpieces—as reproduced in PHOTO-ERA—have received the admiration of professional artists. Mr. Bradford has given considerable attention to characterisations of which he, himself, has been the model. He is an impersonator and mimic to the manner born, and in these activities, he has missed his vocation, as he has also in photography and on the comedy-stage. Of him, it may truly be said that three branches of art have lost an effective exponent. An embarrassment of riches! That Mr. Bradford, who is a well-read man, is familiar with the characters of Dickens, is evidenced by his capital impersonation of Mr. Pecksniff, page 144. The attitude in this cynical character, as well as the admirable photographic ability and technical skill shown, is worthy the highest praise. The data, which are particularly interesting, are as follows: 5 x 7 Eastman view-camera; $8\frac{3}{4}$ -inch Verito lens; stop, F/8; illumination, flashlight (self-operated); 5 x 7 Standard Orthonon; enlarged on Carbon Black Artura Mat.

I have frequently demurred against the use of white garments in portraiture or genre-work, for the reason that, in most cases, there is an absence of gradations or of soft lighting, and the result is disagreeable, harsh and monotonous. However, Charles T. Graves, in his prize-picture, "Good-Morning!", has taken pains to produce a very harmonious and delightful result. The scene is domestic and intimate, with little or no evidence of preparation. The arrangement of the two figures is admirable in its naturalness and harmony of line; and the illumination is excellent. Data: April, 11.30 A.M.; bright light; 1/5 second; Ansco Vest-Pocket Camera, No. 3 ($2\frac{1}{4} \times 3\frac{1}{4}$ inches); $3\frac{1}{2}$ -inch Ansco F. 6.3; used at full opening; Vulcan film; pyro-soda; print, Carbon Black Extra Heavy.

Beginners' Competition

GEORGE R. TAYLOR deserves high praise for his artistically successful entry, "The Old Bridge," page 149. The detail among the trees and on the water has been very well managed. In pictures of this kind, there is a tendency to make the view just as it is—with all the distracting little highlights that abound on the surface of the water and on the leaves of the trees and bushes. Here, however, this difficulty appears to have been overcome with complete success. The center of interest—the bridge—thanks to its character and color, does not stand out too prominently, but is in true and pleasing harmony with its surroundings. Although the bridge is dangerously near the center of the picture-area, it will call forth no criticism on that account, and no one can justly suggest the trimming-process, although, if the bridge were an inch or more above or below the center of the picture-area, it would have yielded, no doubt, a strikingly artistic and pleasing result. Data: August 8, 1920; 3.30 P.M.; one second; Folding Pocket Kodak ($3\frac{1}{4} \times 5\frac{1}{2}$ inches); $6\frac{3}{4}$ -inch Ilex Anastigmat; stop used, F/11; Eastman roll-film; pyro, in tank; print, 8 x 10 P. M. C. No. 4.

John J. Griffiths is to be commended for his faithful interest in these competitions, although if he wins another prize, he will have to move into the Advanced Workers' Competition. There does not seem to be much danger of this, however; for in his charming picture, "A Laugh and a Smile," page 150, he omitted to keep his camera level, as may be seen by the background. He may be excused, however, for not remembering that two faces, close together and on a

(Continued on page 162)



ON THE GROUNDGLASS

WILFRED A. FRENCH



A Replica

THIS well-sounding, much-misunderstood word continues to be misapplied. If, like hundreds of other words—many of them common enough—it were to be looked up in the dictionary by its ambitious but careless users, how our much-abused mother-tongue would shout for joy! The cases of wrong application of the word "Replica," which has but one meaning and has no synonym—except, possibly, "duplicate"—are too numerous to mention in this brief article. However, here are two of recent occurrence, that are too ludicrous to pass over. A skater slipped and fell several times on the ice the other day, and those falls that happened after the first one were referred to by an onlooker as "replicas!"

In recording the temperature early in January, the *Bangor Despatch* remarked that "Wednesday morning was a replica of the preceding day, eight and twelve below zero being the reports."

Now, for the benefit of would-be users of this fascinating and impressive-sounding word, let me say that a *replica* is an exact copy of a work of art made by the maker of the original. After Canova sculptured the beautiful marble-group "Cupid and Psyche," now in the Louvre, Paris, he made an exact duplicate, now in Villa Carlotta, on the Lake of Como. The first is the original; the second a replica. Had he made a third (of which I have not heard) like the original or like the replica, it would have been another replica. If another sculptor were to make an exact duplicate of the original, or of a replica, it would not be a *replica*, but a *copy*.

Hence, it is easy to see that a multiple gun-print, made exactly like the first one, by the same artist, could be called a *replica*.

The Showcase-Display

I AM not the only photographic editor who has advocated that the contents of the studio-showcase, at the street-entrance, be changed occasionally. I made this suggestion some time last year, and a Boylston Street photographer decided to act upon it. The result was not what he had expected, as will be seen from a letter he sent me.

Editor of Photo-Era Magazine. Not long since, I took lunch with a friend at the B. A. A. On coming out, my companion stopped and spoke to a friend in an automobile that had five beautiful children in it, the man's family. "What a chance for me to make a group!" I thought; so I afterward asked my friend to put in a good word for me. "Sure, I will," said he. "His name is Jim Farley, in the leather-business."

I waited a week or two, but no sign of Mr. Farley's family! I happened to have a fine group of five little ones in my showcase downstairs. It received a lot of praise at the Springfield Convention, last September. Well; reading your argument in favor of changing one's showcase once in a while, I went down and took out everything in it, including the 8 x 10 print of the five kiddies I spoke of, and put in brand-new stuff. One day, afterward, I happened to think that Mr. Farley hadn't sent his five little ones for a sitting, so I called him up on the telephone. "Sorry, Mr. B.," said he, "but it's this way. Mr. S. told me to take my kids to

your studio and have you make a group of them, because you were a crackjack at that sort of thing. So one day I took the kids to your studio, but, not remembering your name, looked for a showcase that contained a group of five children Mr. S. told me about, and which he said was in the middle of your showcase at the street-entrance. I examined every one carefully, from Berkeley Street to the Hotel Touraine, but failed to find it. Finally, I gave it up, and the children getting tired, I decided to have them taken anyway, so went a bit further to Jamieson's on Avery Street, who photographed my oldest girl, several years ago, and was very successful. He made a fine group of the kids. Send me your card, and another time I'll look you up!"

Now, Mr. French, if I hadn't followed your advice, when I did, that children's group would have been in my showcase long enough to have landed me a good paying customer. I hope you'll remember to make up for it. It don't pay to accept every man's advice. These photo-journals think they know a lot."

I am sorry for our friend; but with his newly dressed showcase, displaying his artistic skill to advantage, he will attract new customers and more than make up for his disappointment. Apparently he did not think of this.

A Humorous Camera-Club Secretary

HUMOR in the right place is very commendable, and in the case of an active secretary of a camera-club lends spice and variety to his official announcements. The secretary of the Columbia Photographic Society, for instance, indulged his sense of humor in a recent notice he issued to members, as may be seen from the closing paragraphs of the January program.

"THE FIFTH MONDAY, and final day of the first moon, the 31st, has been given to Mr. Archie M. Fitch to manage, govern, direct, manipulate or use as he sees fit in describing the mystery of photographic optical elements, or in other words to talk on lenses. Here is a chance for us poor, struggling camera-enthusiasts, climbing Mr. Longfellow's treacherous mountain side for that famous bale of excelsior, to untangle the terrible confusion of focal lengths, apertures, curvatures, stigmatism, chromatic aberration and other technical nicknames.

"The ancients used to travel to the Oracle of Delphi or arrange a press-interview with the famous Mr. Solomon of Babylon, or some such place on the Sunday-school map, to get the latest dope on portentous events. Mr. J. Fenimore Cooper describes the dusky red-skin method of putting your ear to the ground. Nowadays we have the stock-ticker and ouija-board. But if the members of the Columbia Photographic Society were to stick around the club-rooms more often they would get an ear full of advance-notices, presaging wondrous events. They would hear, for example, strange mystic utterances, such as dance-entertainment, jazz, orchestra, contest-prizes, feminine beauties, hall, buz, buz, m, m, m. If this strange jargon has aroused your curiosity, come around, ye sons of Pandora and open the box. There's a surprise for you."



ANSWERS TO QUERIES



A. P. W.—To remove varnish from a negative, use only methylated spirit or pure alcohol, and *not* denatured alcohol in any form. Place the negative, film-side up, in a clean, dry and warmed porcelain dish of suitable size. Pour enough methylated spirit to cover the negative, rock the dish for a few seconds, and then, with a clean tuft of cotton or a *thoroughly clean* soft sponge, rub the film-side gently, but uniformly and thoroughly. Let the action be as even as possible, and then pour off the alcohol and apply a quantity of fresh alcohol (methylated spirit), going through the same process as before. Repeat this, until the negative is cleared of all traces of varnish. If the negative appears streaky, the work was not done properly and will necessitate another immersion in alcohol with subsequent treatment as before. Beware of warming the alcohol in the dish, except by placing the latter over a heated radiator; for the use of a flame might be dangerous.

W. P.—Your friend's Tessar F/4.5 is faster than your R. R. F/8 as explained by a simple equation. First convert the lens-openings into U. S. numbers, F/4.5 being equal to 1.35; and F/8 equal to 4. Then, $1.35 : 4 = 3 : x$. 3 represents the length of exposure in seconds necessary, for example, with the Tessar, wide open, for the indoor-portrait which you mention; x representing the length of exposure to be ascertained, and necessary for your R. R. at its full opening or F/8. To find x , multiply the two means 4 and 3 (result, 12), and divide by the other extreme, 1.35, the result being 9.4 seconds, the time necessary to expose your R. R. at full opening on the portrait in question, provided, of course, that uniform conditions as to subject, light, etc., prevail during both exposures. As to the comparative speeds of the two lenses, both being used at full openings, the Tessar is a little more than three times as fast as your R. R.; or your R. R. is less than one-third as fast as the Tessar.

W. I. H.—Instruction by correspondence in photography has not been found satisfactory, for the simple reason that the person who has no knowledge of photography whatever, and cannot even visualise a satisfactory negative or print, or even an acceptable subject for the camera—be it a landscape, genre, still-life or portrait—will not be able to benefit by advice, printed or written, however well expressed. He who has a practical knowledge of photography is likely to derive practical benefit from an authoritative textbook, such as "Photography—its Principles and Applications," by Alfred Watkins, F.R.P.S.; "The Fundamentals of Photography," by C. E. K. Mees, D.Sc.; "Photography of Today," by H. Chapman Jones, F.R.P.S.; "Photography and Fine Art," by Henry Turner Bailey; "Professional Photography" (published in two separate parts), by C. H. Hewitt. Special branches in photography, such as color-photography, photo-micrography, photo-chemistry, the use of the air-brush, photo-optics, telephotography, photo-physics and chemistry; airplane-photography, cinematography, photo-engraving; X-ray plates and films; optical projection, etc., are dealt with in special books on these subjects. Besides, the student should always have at hand a reliable and up-to-date dictionary on photography, such as the one by E. J. Wall, F.R.P.S. A list

of the above-mentioned books, and many others of standard reputation, is published in every issue of PHOTO-ERA MAGAZINE.

E. B. H.—There is nothing very phenomenal about the fact that red cliffs photograph white. The explanation is, that if the cliffs photographed black they would be reflecting only red light; but the photographs prove that they are reflecting a considerable amount of violet and blue light which contributes very little to the red-sensation. In other words, although violet and ultra-violet light is very photographically actinic, it produces very little color sensation in the eye. We think that if an analysis were made of the light reflected from the cliffs, the analysis would confirm this opinion. There are very few red objects in nature which do not reflect a considerable amount of blue light.

A. W. I.—The uneven tone in your sepia-prints is possibly due to uneven toning but to improper fixing. If prints lie together in the fixing-bath, and are not properly separated and thoroughly fixed, the uneven action will not show up until the prints are in the toning-bath, and then irregularities of tone may occur.

I. C. V.—The cause of blistering is very apt to be old or weak fixing-bath—though too abrupt changes in the temperature of solutions may also be responsible. When the blisters are only slight, it is usually possible to rub them down into contact again when the print is nearly dry. This should be done by covering the print with a piece of smooth paper and rubbing with the finger-tip.

L. W. B.—The mottled condition of the sky in your plates is probably due to failure to rock the tray sufficiently during development. When this is not done the solution acts unevenly, and such a condition as you describe is the result.

B. F. B.—There is hardly a better surface on which to trim prints than the film-side of an old glass-negative. It does not dull the knife as quickly as the plain glass, yet it gives a smooth, firm resistance. A sharp knife, a transparent square and an old negative make an excellent substitute for a more elaborate trimming-board.

D. M. D.—It is true that extreme wide-angle lenses seem to distort the image. However, this is in reality not true, for a wide-angle picture held at the same distance from the eye that the plate was from the lens when the view was taken will look correct in perspective. Since it is not pleasant to view a print at only four or five inches from one's nose, it is wiser to select a lens of a more reasonable focal length and thus obtain more pleasing results.

J. W. F.—It is entirely possible to make animals take their own pictures. One method is to secure the camera firmly and focus sharply on some definite spot—as the base of a tree. When everything is in readiness, fasten a piece of meat or other bait to a strong cord and place it where you wish the animal to be. By means of screw-eyes or other device the string can be carried to the camera and so arranged that a pull on the string will release the shutter.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication



Welcome Visitors

AMONG the many welcome visitors to PHOTO-ERA during the month of January, was Sigismund Blumann of Fruitvale, California. It does one good to pass even a short time in the presence of so agreeable and inspiring a personality as that of Mr. Blumann, who is likewise highly educated and well informed on most subjects other than photographic. His ideas of the world—of men, customs and manners—are well worth listening to. Our only regret is that he lives so far away from Boston that we cannot enjoy his society and companionship on that account. In the words of Joseph Jefferson, the actor, "May he live long and prosper!"

The New Secretary of the R. P. S.

MR. H. H. BLACKLOCK, the newly elected secretary of the Royal Photographic Society, is of the excellent age of thirty-five—a time of life at which many of the illusions of youth have been rejected, and when the prospect of a spell of years of full mental and physical activity lies in the future. It would be difficult for anybody to draw up a schedule of the qualifications to be desired in a secretary for the Royal Photographic Society, but it seems to us that Mr. Blacklock's career up to the present time suggests that his experience fulfils the chief requirements at Russell Square. After filling a post for some years in an insurance-office in his native city of Bristol, he was for a considerable period secretary to the British Chamber of Commerce for Italy, at Genoa. On his return to England, journalism occupied him for a while, and during recent years he has been secretary of the Royal Society of Painters in Water-Colors, and of the Royal Society of Painter-Etchers and Engravers. While holding these positions, during 1916, 1917, and 1918, he was secretary for the exhibition of the London Salon of Photography. Commercial manager, journalist, and exhibition-organiser appear thus to be fortunately blended in him, and these qualifications, combined with an attractive personality, should make him an efficient and successful promoter of the progress of the Royal Photographic Society.—*British Journal*.

New Photographic Clubs in Syracuse, N.Y.

IN December, 1920, The Onondaga Photographic Club was organised at Syracuse, N.Y., with a membership of about thirty. It includes men who are doing things in photography—professors of the Syracuse University and Central High School, University students, doctors, business-men and salesmen, and others who desire to increase their knowledge of photography.

The rooms of the club are at 35-36 Grand Opera House Block. The organization aims to be a credit to the city, and to aid in the civic betterment of the community. It seeks to have a program of speakers and entertainments second to no camera club in the country. It will develop a good-sized library of photographic literature. Facilities will be provided at once for doing first-class finishing, lantern-slide making and photomicrograph work.

The officers are: president, Ralph R. Scobey; vice-president, W. J. Chorley; treasurer, Prof. T. I. Hankinson; secretary, J. O. Sprague, Y. M. C. A. Building, Syracuse, N.Y.

The Krafters' Klub of the Y. M. C. A., Syracuse, is a club which was organised about two years ago by men interested in outdoor-life and photography. But this club has developed into a mixed organization with a photographic department. The rooms of the old Syracuse Camera Club in the Y. M. C. A. Building have been secured, and fitted with an enlarging-camera, printing-box, and all equipment necessary for doing good amateur photographic work. There are three darkrooms for developing, and a large room for printing and enlarging.

The Krafters' Klub will seek to interest the hand-cameraists and younger element, and, so far as possible, will do an educational work in teaching them to do their own finishing. It is hoped that there will be splendid coöperation between the two clubs.

J. O. SPRAGUE.

Talk on Japan by A. H. Beardsley

THE lecture-hall of the Boston Young Men's Christian Union, Boston, Mass., was filled by an appreciative audience composed of members of the B.Y.M.C.U. Camera Club and members of the Union, on the evening of February 1, the occasion being an illustrated talk on Japan, by Mr. A. H. Beardsley, Associate Editor and Publisher of PHOTO-ERA MAGAZINE. The pictures were lantern-slides, colored by native Japanese artists, of the temples, natural scenery, native customs and costumes, also of the arts and industries of the Land of the Rising Sun. Although not having visited Japan, Mr. Beardsley had acquired accurate information on his subject and gave an interesting description of each projected picture. Incidentally—and for the benefit of the cameraists present—Mr. Beardsley pointed out the merits and defects of many of the pictures, thus imparting a photographic interest to his entertainment.

W. A. F.

The Waterspout Photographed

Two remarkable photographs of a waterspout were shown at a recent meeting of the Royal Photographic Society, says *The Amateur Photographer* editorially. They were made off the Georgian coast while the photographer was on his way to Constantinople. Hearing some exclamations on deck, he hurried up from the saloon, and having his camera with him, he was able to obtain a record of a straight narrow column of water falling from the sky, appearing like a shaft of light against the dark background of the stormy distance. It is generally assumed that when a waterspout finishes it collapses all at once in its entire length, but the photographs showed commencing disintegration at the lower end of the column. The second photograph, which was made as quickly after the first as the envelope could be replaced and the shutter re-set, showed that disintegration had proceeded a stage

further. It should be of service to meteorology to have such a rare record of a natural phenomenon, which is not often seen, and still less frequently has been photographed, if, indeed, it ever has been before. The photographs were shown to the Society by Mr. A. C. Banfield, and had been made by a business colleague of his while journeying in the Near East.

The Government vs. Eastman Kodak Co.

OUR government-suit has been settled. This is to tell you just how it has been settled.

Under the decree which we have accepted, we are to sell certain specified Divisions of our business, in some cases including the factories.

What is known as the Polmer & Schwing-Century Division, is to be sold, including the trade-names Grafex, Graphic and Century, and also including the factory with all tools and equipment.

Similarly we are to sell the Premo factory and equipment and the trade-name Premo.

The trade-name Artura is to be sold, and with it we are to disclose to the purchaser the Artura formula.

We are also to sell the trade-names Seed, Stanley and Standard, and disclose to the purchasers of those trade-names the formulae for those brands of plates.

If an intending purchaser of the disclosure of one of the formulae is desirous of purchasing a factory as well, we are to sell the American Aristo plant at Jamestown, at a fair and reasonable price.

By the terms of the settlement, we are to have two years in which to make such sales. If at the end of that time the sales have not been made, the properties are to be put up at auction, but with a minimum price to be agreed upon between the government and ourselves.

Dealers in, and users of, the products that are affected by this decree will, first of all, be interested as to whether or not they are to continue to receive them without interruption. Of this they can rest assured.

The two camera-factories affected will be operated by us to the fullest possible extent until a sale has been made and, similarly, we shall continue to supply Artura Paper and, under their original trade-names, such of the brands of Seed, Standard and Stanley plates as we purchased them. Certain of the products now marketed under the Seed, Stanley and Standard names were, however, originated in our own factories, were not a part of our purchase from the Seed, Stanley or Standard companies, are not therefore subject to the court-order and will, at the earliest possible date, be marketed under new trade-names. The most important of these products are the Seed 50 Plate, the Seed Grafex Plate, the Seed Panchromatic Plate, the Seed X-Ray Plates, the Stanley Commercial Plates, the Standard Polychrome Plates, the Standard Post Card Plates and the Standard Lantern Slide Plates.

It is the avowed object of the Sherman law to provide for the widest possible competition. Obviously, then, we are not prohibited from making paper and plates to compete with the brands that we part with. On the other hand, we are expected to compete with them. This we shall do and, in the case of paper and plates, we shall have every facility that we now have, the "Know-how," the same plant, and the same men. It will be for the consumer to decide who makes the best goods—those to whom we disclose our formulae and sell our trade-marks or we, ourselves.

So far as the cameras are concerned, the conditions are different. We are to sell factories and machinery and tools and goods in process as well as the trade-

names. Obviously, we cannot immediately come out with competing lines.

All this will make no difference, however, in the steady flow of goods to you. We intend that the trade and the public shall not be inconvenienced. There will be Grafex and Premo Catalogs, and advertising of those lines, as in the past.

In many respects, we shall presently be in a better position than ever, to go on with our development of photography. Many elements of doubt and uncertainty are removed. The manufacturing-ends of our Kodak Park, our Camera Works (where Kodaks and Brownies are made), and Hawk-Eye plant, where we manufacture lenses, are unaffected. The organization of our sensitised goods department, both manufacturing and selling, remains intact.

The newspaper-reports of this settlement of the government-suit may have disturbed you, may have in a measure destroyed your confidence as to the future. You have now had the story, straight. We have—because we want you to have the same confidence that we have—told you fully and frankly just what the situation is.

Doubt, uncertainty—they are behind us. We are in a position to serve. You are in a position to join us in the big drive for the development of more business.

[From Eastman Kodak Co.'s *Trade Circular* of February 5, 1921.]

William S. Briggs

WILLIAM SUMNER BRIGGS, an ardent and successful amateur-photographer, and for a number of years identified prominently with the Boston Camera Club, passed away February 5, 1921, after a long and severe illness. After he left the China-business, some years ago, he practiced photography in a semi-professional way in a studio at 25 Huntington Avenue, Boston, Mass.; but on account of illness gave up this activity. Mr. Briggs excelled particularly in landscapes and wood-interiors, drawing principally upon the beautiful scenery that abounds in the woods, mountains and streams that surround the beautiful Waterville Valley, not far from Campton Village, N.H. With his camera, and together with the Editor—in the eighties—he did much to reveal the scenic beauties of Waterville, N.H., but, as in the case of most amateur-photographers, the results of his photographic activity passed away with him, although numerous homes are decorated with his pictures that depict some beautiful wood-interior or mountain-stream of his favorite photographic haunts.

The National Geographic Magazine At Its Best

ANY ONE who appreciates good pictures of picturesque countries will find the February issue of the *National Geographic Magazine* especially attractive in this respect. The newly established and liberated countries of Poland, Czecho-Slovakia, Finland, Estonia, Yugoslavia, Roumania, and others offer their large stores of treasures, accumulated for many centuries, to the eye of the interested traveler, and these are presented through photography in the pages of this ably conducted magazine. Page follows page of panoramas, street-scenes, groups of natives, portraits of chieftains, and monuments, in infinite variety and pictorial beauty. The original prints are the product of superb photographic skill, and reflect high credit on the discriminating taste of the publishers of the *National Geographic Magazine*. Enclosed in this re-

markable number is a large, new and specially prepared map of Europe on which are clearly indicated by broad colored lines, all the countries, new and old, as they were left, enlarged, diminished or recreated by the Peace-Conference at Paris.

This number, with the comprehensive map, constitutes a valuable lesson, or series of lessons, in present-day geography, history and photography; and fortunate is he who owns a copy of this eminently attractive issue.

Activity of Our Camera Clubs

WE congratulate the camera-clubs of America on account of the healthy activity they are showing. The Camera Club, New York, the Columbian Society of Philadelphia, the Orange and the Newark Camera Clubs of New Jersey, the Chicago Camera Club, the Los Angeles Camera Club, the Boston Y. M. C. U. Camera Club, and the Portland (Me.) Camera Club, are certainly providing for their members entertainments and object-lessons of a very high order.

Being the principal port of entry for the United States, and otherwise favorably situated, New York City offers its chief camera-club special advantages. The Club, through the energetic activity of its secretary, has been eminently successful this season. It has been showing representative work of the leading English pictorialists, such as Alexander Keighley, Fred Judge, F. J. Mortimer, Hugh Cecil and others, which has been enjoyed by club-members and their numerous friends. It has been a record season for the club and will be difficult to excel. The photographic salons of Pittsburgh and Los Angeles, in particular, have shown their usual degree of enterprise and activity, and it is hoped that other camera-clubs will emulate the examples of the older clubs and procure entertainment and talent for the benefit of their members.

The Eighth Pittsburgh Salon

THE Eighth Pittsburgh Salon of Photography, which will be held in the Photographic Section of the Academy of Science and Art, Pittsburgh, March 3 to 31, promises to be a great success in spite of many discouraging conditions. Secretary Reiter informs us that about two hundred and fifty contributors are participating and about eleven hundred prints have been submitted. Secretary Reiter is showing praiseworthy activity, and is preparing a printed catalog which will be a credit to all concerned. The April issue of PHOTO-ERA MAGAZINE—barring accidents—will contain a well-written and illustrated account of this noteworthy pictorial event.

Pictorial Exhibit of Louis Fleckenstein

AN exhibition of thirty prints, representing pictorial photography by Louis Fleckenstein, of Los Angeles, California, was the principal artistic event during the month of February, at the Chicago Camera Club. The thirty prints shown consisted of genres and landscapes and proved a source of refined enjoyment to all who saw them.

Alfred Stieglitz at His Best

THE exhibition of Alfred Stieglitz held at the Anderson Galleries, New York City, for a number of weeks, beginning with February 7, was very largely attended. The collection contained 145 prints, 128 of which had never before been exhibited in public. The work covered the period of Mr. Stieglitz's activity from 1886-1921, and comprised landscapes, street-scenes, still-life,

portraits and studies from the nude, and throughout represented Mr. Stieglitz at his best. His artistic ability and sincerity of purpose are too well-known to require special analysis at this time. The show received the deserved encomiums of the New York press which, together with the profound interest shown by the visitors, put Mr. Stieglitz in a very happy frame of mind. Although he has not been in the public eye of late years, he has done enough during the past to entitle him to a high place in the history of American pictorial photography.

Fayette J. Clute

FAYETTE J. CLUTE, Editor of *Camera Craft*, passed away JANUARY 28, 1921. In him the Editors of PHOTO-ERA MAGAZINE lose a friend and fellow-editor who was ever kind, courteous and helpful. One who knew him well speaks for us when he says, "He has gone from us; and, in that he suffered greatly in the final incurable illness, it was better so. But he shall continue to live in many minds, in widely divergent places. What resting-place could man desire more noble than in the hearts of his fellowmen?"

Exhibition by Henry Eichheim

A LARGE and interesting exhibition of enlarged prints, landscapes and character-studies of China, Japan and Korea, was held in the art-gallery of the St. Botolph Club, Boston, U.S.A., from February 1-5, 1921. The sixty-nine prints shown served to give a good idea of the pictorial aspects of these three countries, and also of some of the people. The pictures were of the soft-focus variety, in some cases emphasizing this quality to the possible detriment of the pictorial integrity of the subject. When used with discretion, the diffusing-element yielded some delightful pictorial effects and showed that the artist possessed true artistic perception and feeling.

The show attracted considerable attention among Boston picture-lovers and, although Mr. Eichheim spends most of his time out of the country in travel, it is possible that he may allow his collection to be shown at art-galleries and camera-clubs. He may be addressed care of the B. Y. M. C. U. Camera Club, 48 Boylston St., Boston, Mass.

Bangor Society of Art

THE Ninth Annual Exhibition of Photography by the Bangor Society of Art will be held in the Fine Arts Gallery of the Public Library, Bangor, Maine, from May 2 to May 14, 1921, inclusive. The exhibition will be open daily from 9 A.M. to 9 P.M. The last day for receiving exhibits will be Wednesday, April 27. For further information address Orman B. Humphrey, Chairman Bangor Society of Art, Bangor, Maine.

A Little Patience, Please!

THE moving of our publication-office from Boston to Wolfeboro, New Hampshire, caused unavoidable delay in our office-routine, and in the preparation of the February and March issues. We are making every effort to get back to our regular publication-date at the earliest possible moment. In the meantime, a little patience, please.

In the Subscription-Department

"Thus letter is written so badly that I can't possibly make it out."

"Huh! Any fool can read it. Give it to me!"



LONDON LETTER

CARINE AND WILL CADBY



ANOTHER amusing photographic controversy is being carried on at present in the press over some remarkable photographs for which Sir Conan Doyle is standing sponsor. By now we are all familiar with spirits appearing on negatives, but these photographs represent fairies. Actual, visible small fairies. On the same plate as a healthy, normal child, we are shown graceful forms of these little people. One photograph even introduces us to a "brownie" and not one made by Kodak!

These photographs were first published in the *Strand Magazine* a short time ago, and Sir Conan Doyle wrote a description of the circumstances in which they were made, assuring readers that there was no trickery about them. In a way, this was throwing down the gauntlet to photographers and several have picked it up, and attacked him in the press, proving how easily such photographs can be faked.

Mr. Maurice Hewlett, the well-known author, has criticised their genuineness by raising the point of the difference between photographic and pictorial representation of motion. He contends that the movements of the fairies, caught and fixed by the camera, are too graceful and charming for reality, and quotes in support of his case snapshots of a trotting horse. And here, photographers are bound to agree with him, for we know how seldom a snapshot of movement is either graceful or convincing.

The *Strand Magazine* has also published separate photographs of the sites where the photographs were made, as there had been criticisms about some haze in the background and blurring round the child's head compared to the clarity of the figures in the print. These subsequent photographs rather proved that the blurring and haze were accounted for in a perfectly natural way.

One or two friends have sent us clippings from papers about this controversy, for the reason that we have also taken photographs of a little girl and a fairy, to illustrate a children's book called "Finding a Fairy." We have been urged to send some of these photographs to the *Strand Magazine* to show how well photography lends itself to this kind of illusion. But Sir Conan Doyle is very serious over his fairy *protégées*, and who are we that we should put even a pebble of ridicule in the pathway of the pioneer into the occult!

The *Morning Post* has broken out into verse on this subject:

Queen Mab, has science found the key

To your select enclosure?

If so, the cynic's fallacy

Should meet with sharp exposure,

And you, invisible no more,

Become a picture-paper bore.

Oh, people of the fairy clan,

Let wisdom be your saviour!

When next you see a camera-man

Be on your best behaviour,

Lest your felicity he rents

By unforeseen developments.

Yet may the cornered cynic cry

With sceptical conviction:

"These fairy-snaps are all my eye,

In other words, a fiction!
Who says that fairies really live?
The answer's in the negative."

The English Press has devoted a good deal of space to winter-sports' photographs. Each Christmas number has given us pictures of some kind of snow- or ice-sport. Of course, these things are "Christmassy" subjects and the public would be disappointed not to get them. It is a pity, however; for there is no doubt that these illustrations are excellent propaganda for Swiss sporting-centres, and, as many of them appear as early as the end of November, people have good time to book their rooms and make their arrangements. If only the papers would reserve these pictures till January, all would be well; but unfortunately they suggest that Christmas is the time for snow-and-ice-sports, with the result that the Swiss hotels are filled at the festive season when the weather-conditions are anything but certain. Of late years, there has been generally a rather serious break in the frost about the change of the year, and now, with a heat-wave sweeping over Europe, one could hardly expect it to be an exception. The result is that for the first week in January the guests in this little winter-station have been picnicking on the grassy hills, or playing drawing-room polo indoors.

But there are advantages in this waywardness of the weather, at least for serious photographers. As there is very little snow, and that frozen hard, many interesting spots in the high and steep mountains have been reached on foot by camera-men, that as a rule can be visited only in summer, so that many photographs have been made which would have been impossible in a good and normal season.

There is a good deal of irregularity in this country in the way the various periodicals, magazines and weekly illustrated papers acknowledge the authorship of contributions. This is particularly marked when a writer and a photographer co-operate in the publication of an illustrated article. Probably we are wrong to suggest that they co-operate, for more generally photographs are handed to some one by the editor of a paper, to be "written around."

It is in these circumstances that we have noticed the photographer often comes off badly in the matter of recognition and acknowledgment. Now it is proverbial among those who know that it is a very difficult business to illustrate an article satisfactorily, say, for instance, on bird-life in the Hebrides, by photography. It could of course be done; but, for one thing, it would be extremely expensive, especially, if a capable cameraman were commissioned. So it comes about that enthusiasts and specialists in particular branches of photography get their pictures more or less for the love of their subject, and later submit a selection to editors of papers for publication.

Then the writer is called in, and as we have expressed it, writes around the pictures. In such a case the photographer's name should surely appear printed in as important type as that of the individual, however clever he may be, who supplies the text. But in practice, it is often not so. As an example, in the Christmas number of *Country-Life* there are some remarkably clever

(Continued on page 163)



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

PHOTOGRAPHS OF THE YEAR 1920. The Annual Review of the World's Pictorial Photographic Work, Edited by F. J. Mortimer, F. R. P. S. 33 pages text. 86 halftone reproductions. Price, paper-covers, \$2.50; cloth, \$3.50. Postage according to zone. London: Illiffe & Sons, Ltd. New York: Tennant & Ward, 103 Park Ave., American agents.

The excuses made two years ago for the disappointing appearance of this important manual—on account of difficult conditions created by the war—do not apply to the current edition, which is a credit to all that are connected with it. The pictorial and literary contents of the book are of the highest order of excellence. Never do we remember to have seen this work filled with pictures of greater variety of subjects, beauty of treatment and excellence of reproduction. Every department of pictorial photography is ably represented—Portraiture; indoor-genres; still-life; landscape; landscape with figures; groups and nudes indoors and in the open; marines; genres; winter-scenes; animals in landscape; shadow-effects; interiors; pyrotechnics; architectural; mountain-scenery; shipping; wood-interiors; flower-studies; street-scenes. What more can the heart desire?

Among the countries represented are Great Britain, Belgium, Switzerland, France, Holland, Denmark, Norway, Sweden, Italy, Spain, United States, Canada, Japan, Australia, India and Rhodesia. Several well-known pictorialists are absent in the present volume, but their places are taken by capable workers, which circumstance may account for the striking variety of pictorial subjects.

Although the collection contains no picture of ordinary merit, the following plates hold our attention the longest: "Storm and Sunshine," F. J. Mortimer; "Peace after War—and Memories," Harold Cazeaux; "Daphne," Herbert Lambert; "Joy," Ida Krajewski; "David," Marcus Adams; "Curiosity," Richard Polak; "Ariadne," Louis Fleckenstein; "The Vine," Malcolm Arbuthnot; "Florizel," Arthur F. Kales; "Winter-Solitude," Wise; "An Illustration for the Arabian Nights," Fred Archer; "La Poule Tuée," M. A. Bassi; "Marshland-Pastures," John Paul Edward; "Miss Holm," Aage Remfeldt; "In a Land of Romance," J. M. Whitehead; "Corrida de Toros," M. Cervera; "Water-Lilies," Travers Sweatman; "On the Edge and Beyond," A. Wilkinson; "Paysage Flamand," Leonard Misoune; "Burning Leaves," Charles Job; "The Forest Primeval," Rudolf Eickemeyer; "The Turf-Line," John C. Stick; "The Return of the Flock," Fred Judge; "Making Ready," Cecil W. Bostock; "Dance of Salome," Waldemar Eide.

The text is of exceeding interest and value. Besides the editor's accurate and broad review of the year's work, there are ably-written accounts by native workers, of the pictorial activity of Canada, Australia, France, America, Sweden, Norway, Denmark, Holland, Spain, Italy, Japan; a seven-page criticism of the illustrations, by F. C. Tilney, a list of the British

Photographic Societies covering over *eight pages* (American workers; stop, read and ponder!).

THE DICTIONARY OF PHOTOGRAPHY—A Reference-Book for Amateur and Professional Photographers. By E. J. Wall, F.R.P.S. Tenth edition. Edited and revised by F. J. Mortimer, F.R.P.S. Price, \$5.00. London: Illiffe & Sons, Ltd. New York, U.S.A.: Tennant and Ward, American agents.

This now indispensable book of reference—written by an eminent physicist and acknowledged authority in photographic practice, and revised by a distinguished photo-pictorialist and technical expert—has lately come to us from the publishers. Glancing through its 694 pages of text and comparing it with a copy of the preceding (ninth) edition, we find that its contents has been brought up to date. It contains many valuable additions in optics, chemistry, processes, apparatus and terminology, so that it becomes virtually indispensable to the camerist of limited experience and the advanced worker. The advance in price of the volume was unavoidable on account of the greatly increased cost of production; and it is gratifying to observe that the accuracy of its contents and the excellence of typography have been strictly maintained.

Cash From Your Camera

IN its effort to provide practical and helpful photographic information the American Photographic Publishing Co., 428 Newbury St., Boston 17, Mass. has published a book of eighty-seven pages that is filled with up-to-the-minute facts with regard to making one's camera pay for itself. "Cash From Your Camera," with its sub-title, "How to Make Your Camera Profitable, and Where to Sell Your Prints," opens the way for many an amateur photographer to earn money and to enjoy his work free of financial restrictions. The book contains an introduction and deals with Making and Selling Postal Cards; Home-Portraiture; Developing, Printing and Engraving for Others; Copying Old Photographs and Daguerreotypes; Copying Paintings and Sculpture; Photographing Houses for Real-Estate Dealers; Photographing Machinery, Flowers, Animals, etc.; Money in Legal Photography; Advertising-Illustration; Competitions in Magazines; Cover-Designs, Calendars, Travel-Pictures and Photographs for Publication. The comprehensive list of names and addresses of active buyers of photographs is worth the price of the book. The concluding chapter, "Our Save-Your-Postage list," is original and valuable. It contains the names of buyers who are no longer in the market for photographs. Copies of "Cash From Your Camera" may be had of PHOTO-ERA MAGAZINE, Wolfeboro, New Hampshire, U.S.A.; price, paper, \$1.00.

Our Illustrations

(Continued from page 155)

line—as emphasized by the two pairs of eyes—is not conducive to artistic composition. The little child's head might easily have been lowered and a monotonous result would thus have been avoided. Nevertheless, this portrait-group is successful in other respects and, particularly, in the tonal values. If he makes another group of this kind, he should remember to abbreviate the space above the heads, which, in the present case, is excessive. Incidentally, the observer will not neglect to notice the reflection, in

(Continued on next page)



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



The following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of January, the last issues of which have been disclosed to the public.

Patent for Camera has been granted to William A. Elberman of Chicago, Ill.; patent, number 1,361,031.

Patent, number 1,361,168. Intermittent Movement for Moving-Picture Machines. Woolridge Brown Morton, Larchmont Gardens, N.Y., assignor to The Pathscope Co. of America, Inc., New York, N.Y., a Corporation of Delaware.

Roll-Film Developing-Rack, patent, number 1,361,192, has been granted to Charles W. Smith and Harry S. Kidwell of Chicago, Ill.

Patent, number 1,361,767. Holder for Photographic Films. Willis A. Leiter, Springfield, Ohio.

Camera-Film Developing-Tank and Tester, patent, number 1,364,320, has been granted to Jackson J. Ross of Chicago, Ill.

Film-Tester, patent, number 1,364,321, has been granted to Jackson J. Ross of Chicago, Ill.

Number 1,364,958. Color-Photography, granted to Ray L. Stinchfield of Rochester, N.Y., assignor to Eastman Kodak Company, Rochester, N.Y., a Corporation of New York.

Number 1,364,959. Element for Use in Color-Photography, granted to Ray L. Stinchfield of Rochester, N.Y., assignor to Eastman Kodak Company, Rochester, N.Y., a Corporation of New York.

Carl Bornmann of Binghamton, New York, has invented a new and useful improvement in a Camera and has been granted patent, number 1,365,083, which has been assigned to Ansco Company, a Corporation of New York.

Number 1,363,217. Photographic-Film Holder. John Clayton Backus, Smeethport, Pa.

A Moving-Picture Camera has been invented by Fred N. Hallett of Seattle, Washington, patent, number 1,363,249.

Albert K. Gulhaug of Wolf Point, Montana, has been granted patent, number 1,363,410, for Photographic-Printing Frame.

Number 1,363,414. Exposure-Identification Attachment for Cameras. John R. Hofmann and Carlisle Laughlin, Berkeley, California, assignors to mesne assignments, to Ansco Company, Binghamton, N.Y., a Corporation of New York.

Means for Use in Photographic Reproduction, patent, number 1,363,517, has been granted to Matthew Marrin Kulus, Auckland, New Zealand.

Photographic Reproduction Apparatus, patent, number 1,363,518, has been granted to Matthew Marrin Kulus, Auckland, New Zealand.

Alfred C. Moss, of Ogden, Utah, has been granted patent, number 1,363,899, for Autographic Camera.

Number 1,365,999. Multiplying-Camera. Ethan Huntzinger, Piqua, Ohio.

Camera, patent, number 1,366,158, has been granted to Nat Elmer Brown, Grand Haven, Michigan.

Herman Shapiro, Cleveland, Ohio, has been granted

patent, number 1,366,748, for Photographic-Development Apparatus, which has been assigned, one-half interest, to A. E. Bernstein and Frank S. Day.

Number 1,366,876. Photographic Camera. Robert L. Colter, Lakeland, Fla.

London Letter

(Continued from page 161)

photographs of birds on their nests, work that must have needed much perseverance, skill and technical knowledge. And yet the photographer's name is printed so small in comparison with that of the author of the article attached, that it would pass unnoticed.

In the same number, Mr. Arnold Lunn (the ski-ing expert) has collaborated with the present writers, he producing the letterpress, and we the photographs; and in this case both are treated equally and fairly as to importance. The case of the bird-photographer is not an isolated one, and such treatment seems so obviously unfair, that it needs only to be exposed to be righted in future.

The yearly photographic exhibition of the Alpine Club is about up to its usual standard. The technical quality is almost uniformly good. But we ask for more than that in these days, and we could wish that some of the exhibitors had a more pronounced leaning towards the really pictorial. They have such splendid chances to secure impressions of wonderful scenery, often in most attractive lightings, that one can only regret that so many of the photographs shown are quite without spirit, lifeless and map-like.

Photograms of the Year is now on the market, published by Life and Sons at seven shillings and sixpence. There are sixty-eight full-page reproductions, besides a considerable quantity of reading-matter. The original photographs, from which the plates were made, are to be formed into a little exhibition and circulated among the photographic societies of the country.

Our Illustrations

(Continued from page 162)

the windows, of the landscape which is behind the camerist.

Our Contributing Critics

THE picture that our friends are asked to criticise this month is of an engaging character. The author is Daisie B. Chapel, and the juvenile model may be one of her near relatives—at least, a friend. Our critics will therefore be guided by their usual sense of courtesy in criticising this picture, which has some faults, the pointing out of which will be accepted gracefully and gratefully by the photographer. Data: California; December, 10.30 A.M.; north window; 1 second; 8 x 10 view-camera; Darlot Lens; large stop; 8 x 10 Seed 26 X; pyro, tray-development; contact-print on Artura Iris C.

Example of Interpretation

IN interpreting the subject for the April competition "Home-Scenes" (Interiors), the participant will find the quiet game of cards, depicted on page 146 by Mabel

(Continued on next page)



WITH THE TRADE



Photo-Shop of Philadelphia

THE enterprising proprietor of the Photo-Shop of Philadelphia, 2234 North 29th Street, Philadelphia, offers an inducement elsewhere in this issue that we take pleasure to call to the attention of our readers. The excellent workmanship and courteous attention given to orders have placed this photo-finishing establishment in an enviable position. We hope our readers will avail themselves of this special offer.

Ilex Shutters and Climatic Conditions

ONE test of a good shutter is whether or not it operates surely and accurately under varying climatic conditions. Ilex shutters, manufactured by the Ilex Optical Company, 784 Ilex Circle, Rochester, New York, may be depended upon to render service in nearly all conditions of weather. This is a point for the traveler and vacationist to remember; and, as for the professional photographer, he knows the vital importance of accurate shutter service. An attractive catalog may be obtained from the manufacturers at request.

MacMillan's Distograph

ON former occasions we have called our readers' attention to the accuracy and effectiveness of MacMillan's Distograph which makes sharp pictures the rule rather than the exception. We are informed that a slight advance in price is unavoidable and that the price now is to be \$1.50; Canada and foreign countries, \$1.75. In our opinion, the advance in price is justified and we are confident that the sale of MacMillan's Distograph will not suffer in the least—it is well worth the slightly increased price.

The Wollensak Prize-Contest

THERE are many users of Wollensak lenses among readers of PHOTO-ERA MAGAZINE. For their benefit, we call attention again to the closing-date of the Wollensak Amateur Photographic Competition which is to be April 1. For conditions that govern the competition, we refer those that are interested to the advertising-pages of the February number.

One-Minute Photography

A BOOKLET reaches us from the Magna Plate Company, 2 and 47, East Borough, Scarborough, containing particulars of the cameras for outdoor one-minute direct portraits on cards and buttons, says a British cotemporary. The Magna Company supplies several sizes of camera for this business, and also the requisite sensitive cards and buttons. Moreover, it is ready to supply formula for the making of the emulsion, either gelatine or collodion. The booklet is more than a catalog, for it contains formulae for the combined developing-and-fixing solutions required in this branch of work, and also notes on the making of these portraits by flashlight. It is within our own experience that the information contained in it is of a kind which is very

widely sought, and we have no doubt that there will be many applications for the booklet.

Johnston's Snow White

WE are always glad to be able to recommend a product that we know fills a need among amateur and professional photographers. In this case, Snow White Marking Inks is the product and J. W. Johnston, New Arts Bldg., Rochester, New York is the manufacturer. Snow White has made good among critical users and we suggest that those who are interested write to the manufacturer for detailed information which he will be glad to give to any reader of PHOTO-ERA MAGAZINE.

Our Illustrations

(Continued from the preceding page)

Heist Biekle, a suitable incentive, although we do not believe in gambling. We think that an innocent game, like the one portrayed by Miss Biekle, will not offend the moral sensibilities of any worker. The picture has certain merits, which, however, are dimmed by faults, such as the too sharp and insistent appearance of the background. This feature should be retained, as it is a part of the home; but it would have been very easy for the artist to have subdued it slightly by using the lens at full opening. The artist's anastigmat, used wide open, would have kept the sharpest focus within the plane of the figures, possibly slightly softening the details of the furthest figure and those of the lady in white. The gravest mistake in this composition is the large gap in the foreground, for the partners of a four-handed game usually sit opposite each other, which would bring the lady in black immediately into the foreground. However, the artist was probably afraid to wound the feelings of this member of the group. The Editor cannot speak positively on this point. It is possible that, for the sake of the artistic result of the picture, this particular player might have been willing to turn her back to the camera and, in this way, preserve the naturalness and artistic character of the group.

In making groups of this kind, it is well for the workers to remember the fault in composition in Miss Biekle's picture. The data, not complete, are as follows: Goerz Lens; Hammer Plate; Flashlight; $4\frac{1}{4} \times 6\frac{1}{2}$ print.



An Interesting Question

Dear Editor:—My friend has a Tessar F/4.5 and I have a rapid rectilinear of approximately the same focal length as his Tessar. If he makes good busts wide open, and I use mine wide open, how much longer should I expose with my F/8 than he with his F/4.5?

W. P.

[Inasmuch as this query was written apparently in all seriousness, our friend's question will be found answered in this issue's department of answers to queries.—EDITOR.]

Wollensak World

PUBLISHED BY THE
WOLLENSAK OPTICAL COMPANY
ROCHESTER, NEW YORK



DEVOTED TO
LENS AND SHUTTER
INFORMATION

Vol. I

MARCH, 1921

No. 3

MANY ENTRIES IN PICTURE CONTEST

Wollensak \$100 Competition Closes April 1st

The amateur photographic competition, fully described in last issue of this magazine, has attracted a host of enthusiastic contributors.

Seven cash prizes of \$5.00 to \$20.00 will be awarded, and every contestant submitting two or more pictures, whether a winner or not, will be given a handsome watch-fob with the Wollensak trademark seal. There is still time to send in your entries.

For further details, see last month's ad or write to the company.

The Photographic Romeo

A customer writes: "When I buy a lens and fall in love



THE youngster was full of life and the light was none too good. But the extreme speed and fine definition of the Series II Velostigmat $f:4.5$ helped to make these two charming studies by E. J. Houser possible.

No wonder this all-round lens has proven so popular for Graflex and studio work!

with it, I like to tell the manufacturer. I find your Verito does all you claim and more. I was so well pleased that I recommended it to a friend who also bought one."

THE complete line of Wollensak photographic lenses and shutters is the result of twenty years of experiment and specialized manufacturing.

Our extensive facilities are at your service. If we can help you in the selection of your lens, feel free to call on us.

There's a catalog for the advanced amateur or professional—free on request. Send a card for a copy to the

**WOLLENSAK OPTICAL
COMPANY**

1415 CLINTON AVENUE NORTH
ROCHESTER NEW YORK



Anna Wants a Job

This girl, Anna Stigmat ($f:7.5$) is not a very pretentious individual, but is a handy girl around the house and willing to work for you at a moderate price. She is not as fast as her sisters Velo Stigmat $f:4.5$ and $f:6.3$, but if you can't afford high-priced help like the speedy Velos, Anna will prove a darn good girl to employ.

Anna wants a job. We promised her and several other Annas that we'd find jobs for them on hand cameras. She will come and work for you as pictured above for \$10.00 or less. Ask us or your dealer more about her.

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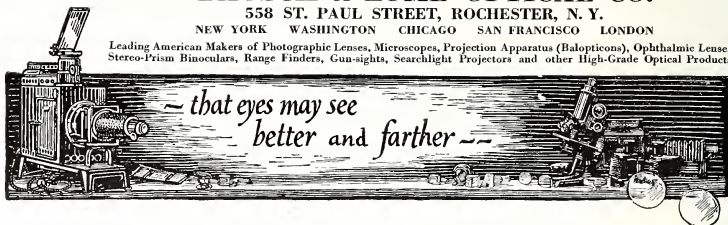
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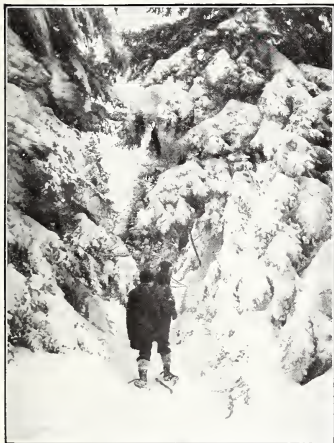


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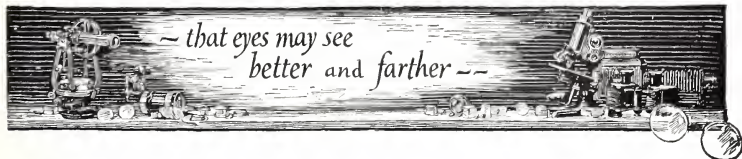
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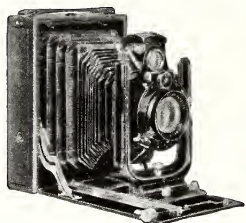
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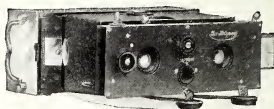
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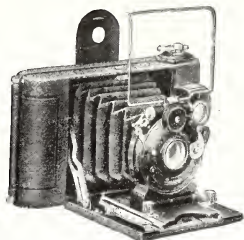
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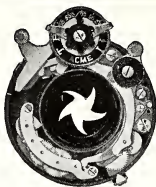
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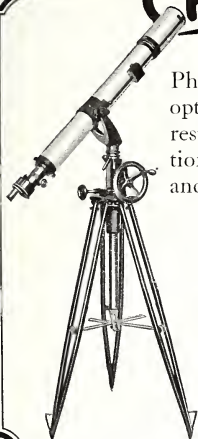
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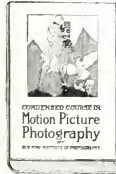
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The American Journal of Photography

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Vol. XLVI

APRIL, 1921

No. 4

Democracy in Art

HENRY HALLAM SAUNDERSON



ANY people think of the artist as a man detached from his fellow-men—for, being a genius, he is not quite normal. And, being engaged in art, he is busy in things that few people can understand. He is, accordingly, unsocial and lives in a strange world which he makes for himself.

There is an organisation in Boston which disproves this idea at every point. Its ideals are highly artistic, its production is exceptional; and yet its whole method and spirit are democratic. This is the Camera Club of the Boston Y. M. C. Union which was organised in 1907. Look in at a meeting and you will see a crowd of men which fills the assembly-room to overflowing—men, eager and alert, who are doing notable work along artistic lines.

The Men

The membership is made up exclusively of men who have an active interest in the highest form of photographic art. But here are laboring men and scientific men; men who are poor and those who are rich; men in the professions, such as medicine and University teaching, with men also who earn their bread by their trades. These differences of occupation do not divide the sympathies of the membership, but tend rather toward broader sympathy and understanding.

They constitute a notably congenial crowd. Out of the diversity of men they have created a real unity. Out of their many occupations and their varied ways of thinking they have intensified their interest in each other. If they were all of one class or one profession, or one set of ideas, the meetings might be dull. But with so much variety of thought, there is a constant stimulus of interest.

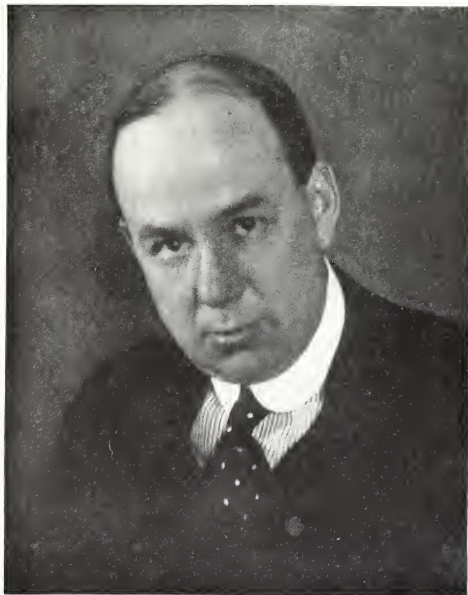
Across all the varieties of interest and experience, there is the strong bond of an ideal which they hold in common—the ideal of artistic

production. An abstract ideal would not be so strong a bond of union; but a working-ideal is one of the greatest solvents of human diversities. Some people are bound together by common beliefs, as in a political club. Some are bound together because of sharing the same memories, as in the reunion of a class in college. Some are welded by financial purposes, as in the organisation of a business-firm. There are many bonds of fellowship; but one of the strongest is that of a group of men who work together for the fulfilment of an ideal. Such is the fellowship of this Camera Club.

Through its whole history, there has been a unity of spirit which is notable. Consequently, the new members are assimilated by that spirit. Every man who comes into membership feels that he has been caught as by a contagion. He is in a congenial crowd. He is a good fellow with good fellows. Real devotion to the ideal of the club and a serious interest in the work done are the essentials in this assimilation.

The variety of professions and trades represented is notable; but still more the races. Here are Japanese and Jews; Irish and Italians; Germans and French; and Americans from many parts of this wide Republic. So from the ends of the earth come the men who make up the membership.

An analysis of ages is illuminating. Those from eighteen years to forty are about equal in number to those above forty years. Out of a membership of more than a hundred, this means that the ardor of youth works with the insight of age. Youth has its artistic dreams; it sees with eyes that can perceive "the light that never was on land or sea"—the light which the artist brings to his work. But "age brings its own lamps with it"; and experience is an incomparable teacher. The venturesome spirit is associated with the disciplined mind. This accounts for some of the exceptional achievements of this club.



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B. Y. M. C. U. CAMERA CLUB

Art is deeply indebted to spiritual vision. In this quality, too, this club shows variety of inspiration. Shintos and Buddhists, as well as men who represent the Jewish and the varied forms of Christian faith, are here. With such varied forms of faith, there is still the "unity of the spirit" which makes a fine expression of the brotherhood of man.

The Spirit

The ideal of art thus brings together this exceptional group of men. Their methods are not less interesting. The first principle is that knowledge is coöperative, not individual. When the bare statement is made that a camera-club has been organized, the common thought is that men have united for the sake of economy.

One darkroom shared by a group costs less than a darkroom for each individual. But the purpose of the club is not primarily economic. It is true of all human progress, and of all human knowledge, that the great achievements have been brought about by coöperation.

This is true of achievements in art. It may look as if the great artist is a solitary genius. But in reality his success is the product of the race. This camera-club is an admirable illustration of the conscious coöperation of men for artistic ends. If a man worked all alone in photography, he could spend his whole life in experimentation and not reach his desired goal. But when men put their experience into a common fund, from which all may draw, there is wealth for all. And progress may become very rapid.



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Thus when men divide up a field of experimentation, and bring together the results, there may be results which one man who works alone would not have reached in years, but which the group may reach in a few weeks.

Artistic judgment, too, is made more keen when the group is substituted for the individual. A man who works for certain results looks at his picture through eyes that see the thing desired as well as the thing attained. A composite picture is the result. The artist, himself, often fails to see wherein the result is other than the ideal. Coupled with this truth is the other that a man needs to welcome criticism of his work and not let his ideal, or the affection which he has for the work of his hands, cause him to be over-sensitive.

The Methods

This method of coöperation, instead of individual effort, has its practical side. The club is well equipped with lockers, darkrooms, studios, working-rooms, and a large assembly-room—the latter being now taxed to its capacity because of the growth of membership. There is necessarily a spirit of fair play among the members. There is a fine training in citizenship as well as in photography in the actual operations. As civilisation advances, we learn how to use the things which we possess in common. We learn how to play fair with the man next to us. This lesson is intensified in this camera-club. Mutual helpfulness expresses admirably the relation of man to man.

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LOUIS ASTRELLA

B. Y. M. C. U. CAMERA CLUB

member to arrange his work with due regard for other members. He may engage time ahead for the use of a darkroom or any of the extensive and fine photographic equipment of the club. He has a right to expect to find the darkroom clean and in good order. He is under obligation to leave it so.

The photographic equipment owned by the club is costly and the total value is large. No one man owns it; yet each man owns the right to use it. In exercising his right to its use, he is under obligation to have proper concern for the others who share this right. This is exactly the situation in our modern civilisation. This camera-club is developing citizenship.

This principle is recognised by the members of the club. It is applied by them not only in their own group, but in the community. The

space occupied by the club is in the building of the Boston Y. M. C. Union, 48 Boylston Street, adjoining Hotel Touraine. The spirit of the Union is the spirit of good citizenship. The club shares certain utilities—janitor-service, light, telephone, and water. These can be metered or measured. It is easy to adjust the financial obligation involved in them.

But beyond these lesser things, there are the greater—the benefits which every man receives who lives in a modern civilised community. It is a constant aim of the club to render public service. These men are not merely working together to make pictures for themselves; they are coöperating to make better citizens of themselves, and to make a better community for all their fellow-citizens. One notable example is their aim to raise the standard of pictorial art



BATTLING THE ELEMENTS

ALTON A. BLACKINTON

B. Y. M. C. U. CAMERA CLUB

in all the newspapers of the city. It will easily be seen that a hundred men, devoted to real art, and also to good citizenship, may have an immeasurable influence. One of the greatest avenues to the human mind is through pictures. To give better pictures to millions of people through the daily papers is a noble ideal.

Some Results

The final judgment on the work of a club of artists must be in the presence of artistic standards. A single sentence will assert much: there is not a salon in America or Europe at which this club is not represented. A number of the members have an international reputation. Some belong to the Royal Photographic Society of Great Britain; and one member, Mr. F. R. Fraprie, is a Fellow of that society. He is the editor of *American Photography*. Many belong to the Arts and Crafts "Guild of Photographers"; and some to the Pictorial Photographers of America. Fully one-fifth of the members have won distinction in art-exhibits.

These are but hints of the results that come

of the work of the club. These marks of distinction, won by some of the members, are the result of the spirit of the club. The whole membership shares the achievements. The spirit in artistic work which has won these enviable distinctions is the same spirit that actuates the whole membership. And it is a spirit that does not rest content with past achievements, but is ever eager for new adventures and for the further pursuit of alluring ideals.

Certain Members

Herbert B. Turner is president of the club. In early business-life, he was connected with the European Tourist Business, and later became a book-publisher. He retired at the age of forty and, for the last ten years, has spent his time in travel and the study of photography. Architectural subjects and marine-views seem to predominate in his work.

Raymond E. Hanson was educated at the Massachusetts Institute of Technology as a chemist, and is connected with the chemical and soap industry. He is preëminently a land-



SELF-PORTRAIT
RALPH OSBORNE
B. Y. M. C. U. CAMERA CLUB



TAOS, NEW MEXICO

B. Y. M. C. U. CAMERA CLUB

HENRY EICHHEIM

scapist, but of late has become interested in figure-studies.

For a number of years Alton H. Blackinton has been connected with professional photography. He was the Official Photographer of the First Naval District of the United States Navy, during the War. At present, he is on the photographic staff of the *Boston Herald*.

Louis Astrella is by profession a sign-painter and a window-letterer. He works much with the miniature-camera. He plans his subjects in advance, and spends weeks at a time accumulating and building the properties for his pictures. Genre is his principal theme.

Harold E. Almy is a financial investigator. Formerly he was connected with Bradstreet and is now in the Department of the Commissioner of Banks, of the State of Massachusetts. He is interested in all branches of photography, but prefers portraiture.

Printing is the vocation of Merton L. Vincent, one of the earliest members of the Camera Club, serving several times as its president. He is interested in all branches of photography, but of late years his work leans toward portraiture.

Henry Eichheim is a well-known violinist, and, for many years, was connected with the Boston Symphony Orchestra. Mr. Eichheim has traveled extensively and, for the last two years,

has resided in the Orient. His work leans toward architectural subjects and genre.

Gustav H. Seelig is in the woolen trade. He exhibits in all the International Salons. Snow-scenes appeal to him perhaps more than any other branch of pictorialism. He may be said to be a landscapist.

William J. Jaycock is a professional skater. His work leads him at times as far as Australia. Bird-pictures are his hobby, and he puts great patience and hard work into his subject. He is also interested in making lantern-slides.

Ralph Osborne is a singer by profession. He has studied in Paris for a number of years. As a forceful and sympathetic interpreter of classical songs, he is prominent. He speaks French with fluency and elegance equal to that of the highly educated Frenchman. His photographic work is general though largely in portraiture. When in Paris, he imbibed much of true and refined art, and it is exemplified in his portraits. PHOTO-ERA MAGAZINE, January, 1918, contained a superbly illustrated article from his pen ("Experiences in Amateur-Photography").

Arthur Hammond is the associate-editor of *American Photography* and the author of "Pictorial Composition in Photography," as well as numerous articles on photographic technique. The readers of PHOTO-ERA MAGAZINE are familiar with his beautiful landscapes and portraits.



UP IN CLOUDLAND

B. Y. M. C. U. CAMERA CLUB

W. J. JAYCOCK

Retouching for the Amateur

Parts Two and Three

DR. H. GRASCHOPP

Part II. Positive Retouching



FROM the nature of the thing, if the fault lies in the negative the work must be repeated in every individual print. It follows, necessarily, that positive retouching must occupy a quite subordinate position. Every amateur should devote the greatest attention to the negative, and then he will have little or nothing to retouch in the positive. Should one or more prints show defects, however, he ought first to consider whether it would not be simpler and cheaper to make a new print than to attempt to retouch the faulty copy. Nevertheless, I shall also say something about retouching them.

Positive retouching for the amateur may be confined chiefly to removing spots. Retouching on printing-out paper is usually done with water-colors: on platinum and silver-bromide paper with India-ink or carbon, and possibly with black and white chalks. Instead of the regular watercolors, so-called retouching colors are used, which are applied with a fixing-medium, usually gum-arabic or white of egg, generally put up in tubes or small vials in the ordinary photograph-tones. The fixing-medium is intended partly to give the colors a better hold on the paper, as well as to give the retouched part a gloss. The color is applied with a fine brush. In order to give the color a gloss, enough gum-arabic or beaten white of egg is added to make the color slightly duller than the print. Mat-paper prints, of course, do not require such addition, regular watercolors being better suited.

Retouching on silver-bromide and black platinum paper is much simpler than on printing-out paper, as they can be readily worked on with India-ink or with black and white drawing-chalk or pastels, which latter have the convenience of being easily erased with kneadable rubber (art-gum) in case the tone may not be correct or the retouching is otherwise defective. Quite large surfaces are retouched with carbon. In order to have the carbon or chalk hold to the paper they must be fixed, for which purpose either a fixative or a clear solution of shellac in alcohol is applied with an atomiser held at a moderate distance from the picture, which is placed on its edge in the same way as a crayon-

artist fixes his drawings. These atomisers are seldom to be found at the ordinary photographic dealer's. They must be looked for in a store for artists' materials.

Of the retouching of silver-bromide prints with India-ink or carbon, I can speak approvingly. On the other hand, I have found that retouching printing-out paper is not only seldom successful, but is also unnecessary. After a brief calculation, I find that retouching-colors cost more than a passable new print, and the work required is out of all proportion to the result, if one also considers that these prints are usually of small size, so that the material cost of a spoiled copy is comparatively small. It is different with silver-bromide prints, as they are mostly in the form of enlargements of considerable size, and the really small amount of trouble required for retouching, which is easier than on any other kind of paper, is well repaid. Work with carbon and chalk is especially recommended as the finest shading can be brought out without difficulty and the fixing with atomised shellac is extremely simple. Any one who understands something about the use of crayons could very quickly pick up the practice. To the amateur who has his small original views enlarged, this sort of positive retouching can be heartily recommended. The results pay for the small amount of trouble.

I shall now speak of that method which I and many of my colleagues have to thank for our finest results.

Part III. Indirect Retouching

The idea of indirectly retouching photographic pictures is not new, and I make no claim to be the originator of it. But the process, itself, offers quite important advantages over all other ordinary methods of retouching, so that a short description will, perhaps, be welcome to many photographers and will help to avoid the dangerous reef of negative-retouching.

The process, according to the idea of indirect retouching, culminates in the reproduction of a retouched picture. The photograph which requires manual work of any kind is printed on a smooth, mat chloro-bromide or silver-bromide paper. Personally, I prefer for this work the chloro-bromide of silver paper with a smooth



EIGHT O'CLOCK

IRVING S. LOVEGROVE

mat surface, for several reasons. The tone-color is comparatively easy to match with water-color, such as neutral black or sepia, and readily takes brush-work without spreading, which is not the case with all such papers. Still, on some other papers the prints are just as clear in the lights and full in the shadows.

I work such a print all over with color or chalk until I have a positive that answers fully my desire, in every respect. The picture must be absolutely faultless, must have the correct gradation between lights and shadows—in short, must be perfect technically and æsthetically.

This retouched copy I reproduce with the camera—at least double extension of the bellows is needed—or with a special reproducing-apparatus. I now obtain a new negative. It is, however, a negative which at the most will have only trifling defects from dust, etc., which I can immediately correct with the knife described in Part I, or with covering-color; and from this negative I can make positives, diapositives—in

short, everything for which I require a faultless negative.

This method of making a faultless picture is comparatively simple and can be recommended to every photographer, because no special practice and experience are necessary as for judging and improving a negative; but the amateur has only the incomparably easier work of retouching a positive with color or with chalk, and all the rest can be done by purely photo-mechanical means.

So I think that I have sketched in broad lines the chapter on photographic retouching-work for amateurs, and can only wish that more attention will be given it on the part of the photographic press and of the amateurs in this line than has been devoted to it heretofore, and that all amateurs who have risen above the primitive puttering may also do the necessary retouching as far as practicable in the negative, and rather make fewer but technically faultless pictures.—*Photographische Rundschau*.

Fundamentals of Print-Criticism and Appreciation

Part Four—Artistic Quality: What It Should Be

AUGUST KRUG



HERE are those who affect to believe that there is no art-side to photography: that a photographic print can have no claim to be artistic. The argument seems to be that exposure and the after-processes are mechanical, hence inartistic; if handwork is resorted to, the picture ceases to be a photograph. As space and inclination are lacking for us to discuss and refute these points, it is sufficient for us, as photographers, to believe that there *is* such a thing as the art of photography.

We would not, most of us, be content to remain merely skilled craftsmen at our not very difficult craft. If there were no progress to be made, no advancement possible, no unattainable heights to which we could aspire, then we might well turn photography over to the "button-pushers."

For it is a fact that the technical part of photography can be acquired by any one with a liking or natural aptitude for it—by giving a certain amount of time and application to the plentiful literature on the subject. It can be taught; it is an exact science. Its mastery is as essential to the pictorialist as the ability to draw is to the painter; the non-technical photographer is in the same position as the painter who cannot draw. He may "get by," as the saying is, and his productions may even be the fashion; how far superior his work would be were he better versed technically is a matter about which we can only conjecture. The craft of photography, then, is communicable; but the artistic side is not. The technical part of photography is in the camera, plates, paper and chemicals; the artistic side of it is in the photographer.

True, there are books to be read which will, if thoroughly assimilated, give the photographer and critic an excellent working-knowledge of the principles upon which most pictures are constructed. An understanding of these underlying principles is absolutely essential to both the pictorialist and his critic; as I see it, however, perfect composition, as well as perfect technique, are not the "be-all and end-all" of pictorial photography. The books may be likened to the water-wings which a timid swimmer places about him in his first efforts in the water. A necessity at first, they are discarded as confidence is gained in the ability to make progress without their aid. We can follow the analogy further and say that

the test of the true pictorialist is his independence of convention as exemplified by the books on composition; just as the somewhat elementary test of the swimmer is his ability to propel himself without artificial support.

Or, perhaps, it would be better to compare the books on composition to the letters of the alphabet, which must be memorised and used consciously at the beginning. Soon, however, they merge into and become a part of ourselves; and, in a short time, it becomes a distinct effort for us to misspell a word or to misplace a highlight—that is, theoretically. A gentleman made the remark that he composed better symphonies than Beethoven, and painted better pictures than Bouguereau—in his mind; his hand, however, could not carry out what his mind conceived. And one of the prominent instructors in photographic work, recognising the fallibility of the apparatus we use in translating our ideas, is fond of saying, "Don't do as I do, but do as I say!" My advice to the photographer and critic, therefore, is to get and read thoroughly every book which has any bearing upon this matter of composition and design—not, necessarily, photographic works; as an example, Mr. Batchelder's "Principles of Design," which was written perhaps with no thought of its photographic application, is very helpful.

The knowledge of what is good and bad in picture-making being ingrained by this study, the photographer will have a curb on his tendency to the extreme in unconventionality. If there is no restraint, there will be decadence; if the restraint is too strong, progress will be stifled. The critic, in turn, fortified by knowledge of compositional principles, will be able to discern immediately if the primary conditions of balance, unity, principality and subordination have been fulfilled, in the making of the picture. This out of the way, he can then determine whether the photographer, either in choice or treatment of subject, is sufficiently orthodox to require only praise, or whether a damper should be placed on his too-enthusiastic productions.

Composition, then, is but a means to the end we have in mind, the production of a pictorial photograph. When is a photograph pictorial? Just wherein does it differ from the "just anyhow" snapshot? Let us say that a true pictorial photograph contains the best of photography



THE SPIRIT OF '76
M. D. HANSON

improved by the tested art-knowledge of the centuries and raised to a higher power by the ability of the maker to convey, express, make definite his emotions, sympathies, feelings as called for by the subject. This is Art.

Does it sound vague, unattainable? It is an ideal realised in the platinum prints of Mr. Clarence H. White; the delicate bromoil prints of Dr. A. D. Chaffee; the sunshiny landscapes of Mr. W. E. MacNaughtan, and in numerous other instances. The critic, moreover, rather than any other, can set the feet of the photographic fraternity in the right path, by pointing out the by-paths into which we are all prone to wander, and by cautioning against the distractions to true pictorial work. This is simply another way of saying that if the worker cannot "see" the subjects he is photographing in the proper way, the critic is to give him a new viewpoint, if possible. Even if there is no immediate result, the stimulation given by the new idea may bring results months or years thereafter. Proper vision is one of the most important assets the photographer who aspires to pictorialism can possess; it is a real kindness to correct a warped, improper outlook.

What are we to consider constitutes an improper outlook or warped vision? As every photographer knows, there are a number of different styles or "schools" of photography—distinctive in themselves and each of which is probably founded upon some basic truth. The difficulty generally is that eyes dazzled by the contemplation of this truth are incapacitated for seeing the truths underlying the other schools, and extremes are the inevitable concomitant. Where one group will make only straight contact-prints from unmanipulated negatives, others will produce gum-prints which may resemble only faintly the original. Clearly, differing processes of thought are responsible for these wide differences of technique; either, both or neither may be right, according to the opinion of the individual critic. In this free country it is not for us to say that the work our neighbor produces is good or bad; we can only try to understand it; and, if the maker asks our help, to criticise it fairly and impartially, aided by our knowledge of what he is attempting to do.

There is a real danger that the experienced worker, surfeited possibly with photographic honors, and misled by the thought that whatever he does is good—simply because *he* does it—will, for the sake of originality, be tempted to unrestrained expression, which as we have said, will certainly end in decadence. It is not possible for us, as pictorialists, to ignore the great mass of pictures which were made before we appeared upon the scene; or to reject, successfully, the principles upon which all Art is said, with truth, to rest. Decadent originality may satisfy the maker; but it does not delight any but decadents. Let us have progress, by all means—but not at the expense of beauty.

Artistic quality, then—what should it be? The true pictorial photograph is supremely artistic, and we conclude, therefore, that artistic quality is compounded of the elements of technical excellence, compositional knowledge, vision, and the dexterity—"tricks" if you will have it so—that are necessary to place the vision down on paper where it can delight others. A print that fills these requirements has artistic quality.

What is Art?

THE conclusion is that heaven-born geniuses are a myth. Actors are no fonder of thinking hard and laboring hard than any other set of humans. The manager, seeing that there doesn't appear to be very much difference in their calibre, has taken to selecting them by their physical appearance. The actor is the cause, and the manager is the result. The public is quick to respond to really fine acting—that is what fine acting is; for if it doesn't make the public respond, it isn't fine acting. You often hear it said that the public doesn't want art. It would be just as sensible for a man to take a broken watch to be mended, state his wants to the watch repairer and then add that he mustn't employ skill in the operation! For what is art in its practice? It is skill—accomplishment.

JOHN E. KELLERD.



Handling Cut-Films as Plates

FREDERICK C. DAVIS



O my mind, it is a sad thing that Portrait and Commercial Ortho Films are not made in sizes smaller than $4\frac{1}{4}$ by $6\frac{1}{2}$. This deprives a great number of photographers of their use. However, the larger sizes could easily be cut down to fit the smaller holders—but there are no smaller holders made! No apparatus is manufactured for handling films smaller than $4\frac{1}{4}$ by $6\frac{1}{2}$. So listen to your Uncle and you will hear how to use out-films in your ordinary plateholders, developing-tank, and everything else you use with plates, with the possible exception of the drying-rack.

In the following methods of handling cut-films as plates, it must not be construed that I mean that only Portrait-Films or Commercial Ortho Films can be used. It is possible to use film cut from the strip in an ordinary roll of film, or from a film-pack. Indeed, for some work the writer uses pack-films exclusively. Since the work of handling the films begins with the films themselves, it is best to tell about them there.

When using Portrait or Commercial Ortho Films, or other such films packed as plates, all that is necessary is to cut the films down to the particular size you use. For instance, the size of my favorite camera is $3\frac{1}{4}$ by $4\frac{1}{4}$. I buy a package of $4\frac{1}{4}$ by $6\frac{1}{2}$ Portrait-Films, cut each film exactly in half, and I then have two dozen films of the size I use, without a particle of waste.

When using a film-pack as a source of film, another operation must be used. The tabs of the pack are all pulled out, after the photographer has migrated to a darkroom. The pack is then opened and all the films extracted. The black backing-paper is detached from each film-section. It will be found that, although the films are the correct width, they are somewhat longer than the size of the picture your camera takes. Therefore, one end must be cut off. The end on which is pasted the silk-strip (to which was attached the paper-backing) is the end to amputate. It is necessary merely to place an old plate over the film so that three of its edges are directly over three edges of the film, and to cut off the protruding other end with a sharp knife or old razor-blade. This will result in a piece of film the exact size of the plate that fits your holders. Each film-section is treated likewise; and if all the films are not to be used at once, the unused ones are stored away in an old plate-box.

Film-sections can be cut from roll-film, also; but that is a difficult, not to say, tiresome task.

A film-pack is easier to handle, and is not so infernally contrary about curling up.

Having cut our films to fit our holders, we will proceed to solve the problem of making them go where they never were intended to go. It is necessary to have some clear pieces of glass. Discarded plates cleaned of their emulsions are the best (and cheapest) thing for the purpose. Strip a dozen plates or more at once. They must be perfectly clean when used with film, for a sheet of glass travels all the way through the finishing process with each film-section, except when drying the film.

We retire to a darkroom and the holders will now be filled with the cut-films. To do so, a clear piece of glass is first inserted into the holder in exactly the same manner as if it were a plate. If your holders are such as have a lock on them (such as the holders for the number three Kodak Plate-Back holders in the first illustration) these must be fastened before the film is inserted. It is preferable to place a sheet of glass, in that case, in each side of the holder, and then fill with film.

The manner of filling the holder with a piece of cut-film is shown in the first illustration. One end of the film is slipped under the edge which holds the glass in the holder; then the film is bent, and the other end slipped under the opposite edge-catch. If the film has been cut to the same dimensions as the glass-plate, it should lie perfectly flat in the holder and have exactly the same appearance as a plate. If the film bulges, you have either cut the film too long, or have not slipped the edge of it under the catches as far as it will go. It matters not if the film will slip about a trifle when touched, for it will not fall out, except, of course, if the film has been cut too short. It goes without saying that the hands, when filling the holders, must be scrupulously clean and absolutely free of moisture—otherwise you will have an assortment of finger-prints such as Mr. Beardsley told about in his "Practical and Humorous Experiences" serial.

The slides are then replaced in the holders, and the photographs made on the films exactly as if they were plates. No adjustment of the groundglass is necessary, because the film is in exactly the same plane as a contained plate would be. After the plates are exposed, they are carried to the darkroom for development.

It is presumed, here, that the reader uses the tank-method of development of his plates. If

he does not, there is no difference between the manipulation of the cut-films and the manipulation of plates, except in drying them.

When preparing to develop the films, the photographer should provide a basin of water of the same temperature as the developer. The developer should be mixed, and poured into the tank, ready for use. The slides of the holders are drawn out. Then one film and plate are removed together, exactly as if removing a plate. The film and glass are both immersed in the water after being separated. The film is allowed to soak until the gelatine is soft, which should take from ten to fifteen seconds, depending on the temperature and film used. The wet film

When wetting the films, before placing them against the glass plates, care must be taken that the gelatine is perfectly soaked. If the film is not sufficiently soft when the two are placed in contact, the result will be stains on the film, which stains can be removed only by redevelopment. No stains will result, if the simple precaution is taken to wet the films thoroughly.

When placing the films in the rack, be sure that two films do not face each other. In other words, place the glasses in the rack with the films all facing in one direction. The films, while in the developer, sag away from the glasses, and thus, if they were placed face to face, would touch each other with an undeveloped or under-



FIGURE 1

is then placed on the wet glass. Be sure that the sensitised side is up; that it is not in contact with the glass. The edges of the glass and film should be in juxtaposition, which can be accomplished easily by placing the glass and film together as in the second illustration. It will be found that after the film and glass are placed together, they will cling to each other tightly until they are immersed in the developer, when the film will move away a mere fraction of an inch from the glass and allow the developer to act on every part. All the films are wet and placed on glasses in the same manner. Each, as they are placed together, is then placed in the developing-tank rack. When the rack is full, it is lowered into the developer and left for a time which is determined by the temperature of the developer.

developed streak resulting. By placing a glass-back next to a film, that is impossible.

When development is complete, the cover is removed from the tank and water is run into the vessel forcefully. Be sure that every bit of developer is washed from the films before removing them from the solution. Take care that no bubbles have formed between the plates and the films, into which developer has found its way and been sealed by the gelatine sticking to the glass. If by chance a bit of developer is caught between a glass and film, at once detach the film from the glass and plunge it into water. Leaving the developer there will, of course, cause a stain. Nothing of the sort will happen, though, if the films are wet thoroughly before immersing them in the developer, and before placing them in contact with a piece of glass.



FIGURE 2

The films, still clinging to the glass-plates, are removed from the developer and placed at once in the fixing-bath. You will notice that, immediately the film is removed from a solution, it clings tightly to the glass backing it, but immediately that it is placed in a solution again, it moves away from its support slightly, allowing the solution to act on every part.

After the films are fixed, they are placed in a wash-tank, still in contact with the glasses. It will be seen that, throughout, the whole operation is virtually the same as the treatment of a plate. Indeed, the films and glasses are really plates with detachable emulsions. In this way, the photographer has all the advantages of a plate, with none of its disadvantages, namely, the danger of breakage and weight.

The films having been washed, they are removed from the wash-water. The film is then stripped from its glass-backing and hung up to dry. For this, I simply stick a safety-pin through one corner and hang the film on a line stretched across the kitchen. If the films are large, two safety-pins will be necessary, one at each of two corners. The glass-plates are washed by pouring hot water over them, then put into a rack to dry, when they are ready to be used again for the next films. It is best to have a double supply of glasses, so that the plate-holders can be refilled immediately after emptying them for development.

The immense advantages and conveniences of the method given herewith are at once apparent.

It gives the opportunity to use cut-films to those who are deprived of their use because of the non-manufacture of the size of film they use. It also gives the ability to use cut-films to the photographer who cannot afford, or does not wish, to buy special holders, racks and other accessories for his camera. In short, every one who uses plates can use cut-films by my method, without investing one cent in any apparatus.

I wish to add a word, here, about the advantages and disadvantages of the different kinds of cut-films. This is wholly a matter for the photographer to decide for himself. I can do nothing more than tell of the films I use, of their weak points and strong points.

Portrait-Films, made by Eastman, are of course the ideal thing for the portraitist. Commercial photographers of a great number use Portrait-Films for their commercial work. Their splendid scale of gradation and freedom of halation are their greatest assets over plates. Their softness places them far above any other cut-films for portraiture.

In parenthesis—if any halation occurs when using cut-films with glass-backing, as suggested here, it can be prevented entirely by placing between the film and glass, one of the black sheets of paper with which the films are packed. This is removed just before development.

Getting back to Portrait-Films. There are many advantages for them which I do not state, here, because of self-evidence. But I have found that the emulsion of Portrait-Films is

very soft, and, unless extreme care is taken, scratches and holes in the emulsion will appear. The addition of more hardener to the fixing-bath will prevent effectively any such trouble, which is easily preventable.

Commercial Ortho Films are the right things for commercial and general photography. They have the snap that commercial work demands and less of the softness that Portrait-Films manifest. The one thing that is in favor of the two mentioned grades of cut-films is that they are coated on a very thick and substantial base. This thickness gives them a strength and springiness that causes them to lie absolutely flat in the plateholders. It also allows them to cling more closely to the plates during finishing than thinner grades of film, such as pack-film.

For ordinary work, I use pack-film entirely. I find it is very satisfactory for all kinds of work. The disadvantage of pack-film is that it is coated on a much thinner base than either Portrait or Ortho Films, and, therefore, it does not lie so flat as they do. Pack-films lie flat enough for perfect work; but there is just a suggestion of a curl along the long edges after they are placed in the holders. That this is negligible, is shown by many of my negatives which have perfect definition to the very edges. A disadvantage of pack-film again appears in that they do not

possess the softness of Portrait or the snap and color-sensitiveness of Commercial Ortho Films. Indeed, the three grades of film can be classed as "Soft," "Hard," and "Medium," in the same manner as paper. The two illustrations with this article were made by flashlight on pack-film developed with pyro in a tank. The prints are on glossy medium, developed in M.Q.

The question of the price of the different films arises. A pack of films for my use costs \$.90. A dozen $4\frac{1}{4}$ by $6\frac{1}{2}$ Portrait-Films cost \$1.25, and when cut in two, makes two-dozen sections. This makes a saving of \$.35 on two dozen films, which is an appreciable difference. The points considered above should enter into the purchase of film, as well as the price. Persons using 4×5 plates will find they can save more money by buying 8×10 films and cutting them in four than by buying 5×8 films and cutting them in two. On this question, you must work out your own salvation.

Plates are rapidly becoming a thing of the past. All the good and none of the bad qualities of plates have been incorporated into films. It is my thought that cut-films will eventually drive plates from the market and become superior to them in every way. The greatest advantage of films now is voiced by the demonstrator who remarked, "And if you break one—you don't!"

Balance By Shadows In Pictorial Composition

WILLIAM S. DAVIS



EVERYONE who possesses even the slightest experience, recognises the importance of having light and dark tones in a picture, to furnish effective contrast, and bring out individual parts; but the shadows which are responsible for most of the darker tones in a scene fall into two classes—1st, those produced by recessed parts, such as the under sides of thick masses of foliage, and architectural detail, or the shady side of objects seen against the light. 2nd. Cast-shadows thrown upon a surface by the presence of some opaque body between it and a strong source of light. Such shadows are most prominent when a scene is illuminated by direct sunshine, or strong artificial light falling from one side, or in front of the observer with his camera.

The kind of shadows first mentioned are accepted as a matter of course, since they are always present in a subject that possesses any depth of perspective, or contains broken contours, but the pictorial value of cast-shadows is not always so fully realised. So important are they, however, that their presence may either make or ruin a composition; depending upon their location and rendering.

Should the subject happen to be so perfectly balanced by the natural disposition of light and dark-tone in the subject-matter, seen in a diffused light, the addition of cast-shadows would be superfluous, and probably upset the harmony of the finished picture; but, as a matter of fact, one does not often find a subject that exhibits such a perfect tonal pattern in the individual objects, but that some improvement can be pro-

duced by means of cast-shadows in the proper place, and I will go so far as to say that in certain circumstances the pictorial material does not exist without such shadows; in other words, the motive lies wholly in the transient pattern formed by the shadows, rather than by the objects casting them.

Although in any open landscape, especially one containing hills, the shadows cast by passing clouds exert a strong influence, due to changing the tonality of important parts of the distance and middle-distance, the most striking effects of light and shadow in the average subject occur

service in picture-making by balancing and uniting other parts of a subject. For instance: dark masses of foliage separated by a broad road can be united in a graceful manner, and the eye led to the focal point of the composition, by well-placed shadows across the path. The study entitled, "Cool shadows lie across the path," illustrates this point. Here the foliage-shadows at the left side of the road lead across to the clump of trees which cast them, at the same time furnishing the note of tonal balance needed to offset the lighter tones of the sunlit foliage in the middle-distance. Another example of the



COOL SHADOWS LIE ACROSS THE PATH

WILLIAM S. DAVIS

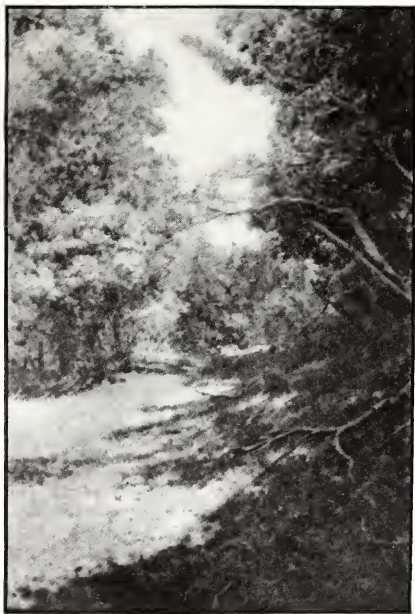
in the foreground; as the shadow-patterns are seen to the best advantage when they are spread out upon the grass, snow, or other surface, virtually at the spectator's feet; or are cast upon a nearby wall, in the case of an architectural subject.

In studying the individual parts of the material which one contemplates using for a picture, the transient shadows must be regarded as elements of line and tone equal in importance to the solid, permanent objects; for after all is said, the image we catch and fix upon the sensitive film is but a shadow after it passes through the lens.

The shadows, even when not striking enough in form to make an interesting pattern by themselves, can be made to perform a highly useful

value of cast-shadows is "Woodland-Shadows," where the slanting shadow in the foreground makes a line that leads the eye up to the mass of dark foliage coming into the picture from the margin at the right. The diversified outline of this mass in shadow gives something of a vista-effect, and adds much to the depth of perspective by concentrating the greater portion of the dark tones in those portions of the subject nearest the observer. Both illustrations show the effect of a side-lighting.

The difference of an hour or two, or in some cases only a few minutes, will alter entirely the scheme of light and shadow—some parts which were in shadow being fully lighted, and *vice-versa*. In such circumstances, the worker is



WOODLAND-SHADOWS

WILLIAM S. DAVIS

quite justified in adopting "watchful waiting," however questionable the wisdom of such a policy may have proved in affairs of state.

In winter, wonderful opportunities are presented on bright days for observing and utilising shadows cast by leafless trees and old fences, or the masses of snow in a fresh-broken trail. Frequently, such shadows are really the making of the picture, from the artistic viewpoint, as in "Sunlit Snow," where the interest centers in the shadows cast by the rail-fence and trees. Try to imagine the appearance of this scene on an overcast day, when the foreground is a blank expanse of almost flat tone where the shadow-pattern now is—also note the concentration of solid objects into a triangle, starting near the right lower corner and extending diagonally across the picture-space toward the "north-east" corner. By covering the snow-shadows with a

piece of white paper, the lack of balance, which would have been caused by a blank foreground, will be forcefully brought out—emphasising the part played by the cast-shadows in providing the necessary balance of lines and tones.

"The Substance and the Shadow" not only shows the beauty of shadows in a snow-scene, but demonstrates their value by leading the eye up to the principal object when there is not a difference of line and tone in the foreground material to accomplish this unaided; also in giving a feeling of perspective to the surface of the snow. Without these shadows to connect the tree and foreground, the former would become an isolated mass of dark tone set in an almost unbroken light space; besides which, the concentration of so much dark tone at the upper part of the picture, would make the "tone-spotting" top-heavy were it not that the shadows

furnish the needful amount of halftone or middle-tint, to unite the tonal extremes represented by the tree-trunk and lighted surface of the snow. Such an effect as this can be obtained, of course, only by working against the light.

Shadows, whether cast or caused by parts of the subject being in shadow, afford the strongest means to bring out the character of a building, or any architectural detail. Even diffused shadows are effective in defining contours of surfaces and the separation of planes. This

upon the concave end-wall, as it shows the shape better than any lines could do.

"Stonington Public Library" shows a good normal lighting for a subject of this character. The front is in the sunlight, whereas the parts at right-angles to it are in shadow, thus giving the feeling of solidity usually demanded in the treatment of a building. But the touch necessary to pull the entire composition together is the dark shadow in the immediate foreground, which balances the heavy foliage back of the



SUNLIT SNOW

WILLIAM S. DAVIS

can be seen in the illustration "Under the Portico," looking along the main entrance of the New York Public Library. The viewpoint was inside the line of supporting columns, the inner faces of which were naturally in shadow. By utilising the shadow-side of one of these in the immediate foreground, a satisfactory accent was obtained to emphasise the lighted side of the next in line, thus helping to convey the impression of distance between them, while the shadow cast by the nearest one upon the tessellated pavement repeated to a certain extent the tones of the shadows in the vaulted ceiling of the portico. Note the tonal gradation caused by the shadow

building; differentiates the tone of the foreground from the middle-distance, and gives more concentration of light nearest the focal point; so, although unobtrusive in itself, this shadow is important, notwithstanding.

The proportion of shadow to lighted areas generally depends upon the angle and direction of illumination. Other things being equal, the maximum shadow-effects in the foreground are seen when facing the light, or with the sun at a low angle and at one side; but individual differences in the nature of the subject-matter will sometimes cause the best effects to be produced when the sun is quite high. In the woods, for



THE SUBSTANCE AND THE SHADOW

WILLIAM S. DAVIS



UNDER THE PORTICO

WILLIAM S. DAVIS

example, the desired shadow-effects sometimes come from overhanging branches which are not seen in the picture, and, if the foliage is thick, too low an angle of lighting might throw the entire foreground into shadow. For a similar reason, some architectural subjects are taken best when the sun is nearly overhead, as one then sees the greatest amount of vertical shadow cast by projecting details.

Now, just a few words regarding relative tone-values of cast-shadows in a picture, since their effectiveness depends a good deal upon careful rendering. Above all else, one should aim to preserve their transparency; for a blocked-up, opaque mass of tone destroys all feeling of perspective and luminosity.

Shadows, unlike reflections, are formed by the cutting off of direct illumination from parts of a subject, which, by eliminating the small

accents of highlight present under full lighting, flattens the general tonality of such parts; these, however, are kept transparent by diffused light refracted from the sky or from surrounding objects of a light tone.

The relative value of a shadow compared with that of the object casting it is subject to several factors which change the result. In the first place; when the light falls upon the scene from one side, and back of, the spectator, the side of an object nearest the observer will be lighted, which will probably cause it to appear lighter in tone than its cast-shadow, even though the latter falls upon a white surface. This can be illustrated by citing the case of a white house surrounded by snow. If the side of the building nearest the eye is fully lighted, then the shadow of the building must appear much darker—in fact it will be of virtually the same tone as the



STONINGTON LIBRARY

WILLIAM S. DAVIS

shaded side of the house. In summer, when a green lawn has taken the place of snow, the cast-shadows will be very much deeper in tone than the shaded side of the house, for the reason that the "local tone" of the grass is much deeper than that of the building; but it is quite possible for a smooth lawn in intense sunshine to be lighter in value than the shadow-side of a white building. Where the local tone of the surface receiving a shadow is lighter than that of the object casting it, the depth of the shadow must necessarily be less than that of the shaded side of such object. Refracted light projected into a shadow from some strongly illuminated, light-toned object nearby may in individual instances alter the relative values as mentioned above, for no two subjects present identical conditions.

The exposures of all subjects that show strong contrasts of light and shadow should always be full enough to allow the shadow-detail to develop in the negative before the highlights are built-up too much. A good rule in dealing with excessive contrast, such as is seen generally when working against the light, is to increase the normal time of exposure in proportion to the excess of contrast present.

When blue or violet shadows are important elements of the composition, as is always the case in a sunlit snow-scene with nearby objects,

it is next to impossible to do justice to them, and to obtain detail in dark portions of the scene at the same time, without the help of a ray-filter and color-sensitive emulsions.

As a protection from lens-flare, or fogging, caused by sunlight falling upon the front surface of the lens, a lens-hood should be used when working against the light.

Dreams

DREAMERS are the saviours of the world. Composer, sculptor, painter, poet, prophet, sage—these are the makers of the after-world, the architects of heaven. As the visible world is sustained by the invisible, so men through all their trials, and sins, and sordid vocations are nourished by the beautiful visions of the dreamers. He who cherishes a beautiful vision, a lofty ideal in his heart, will one day realise it. Cherish your visions; cherish your ideals; cherish the music that stirs in your heart; the beauty that forms in your mind; the loveliness that drapes your purest thought. Dream lofty dreams, and of these, if you but remain true to them, will your world at last be built. And as you dream, so shall you become, for dreams are the seedlings of realities.—JAMES ALLEN.

The Technique of At-Home Photography

O. MENTE



By the technical expression, "at-home photography," was originally meant only that kind of photographs that were made at the home of the customer at his request. To-day, the meaning of the words is much broader and includes all photographs not made under a skylight, but in living-rooms, and therefore includes also those made by modern photographers under the collective name referred to.

The early work in this class indicates—according to our experience—even by professional men with practice under a skylight, a series of unsuccessful results. Let us suppose that one's photographic equipment is good and correctly constructed—that is, an adequate camera and tripod, and a brilliant portrait-lens of suitable focal length are at one's command, there still remain many difficulties to surmount.

First, the photographer will find that in the average living-room with its limited lighting-facilities he cannot get the regular soft lighting that he has in his studio, where, when making single portraits, and the greater part of the overhead- and side-light is shut out by curtains, there is still so much diffused light present that, with our highly sensitive plates, it shows very distinctly in the photograph. This "general light" is lacking in the living-room, especially where there is dark furniture and wall-paper. We have here, therefore, the fundamental difference between work in the studio and that in a living-room.

Yet, without further explanation, it is true that one can make photographs in a single-windowed living-room with light full in front, if the camera is placed before the window, or quite close to it, and the sitter is so placed in the room that he or she receives the full light from the window. But that kind of flat lighting, without any overhead light, is only in the rarest cases desired and, not to speak of the lack of plasticity, such portraits do not usually give true likenesses. Moreover, it should be particularly noted that living-room portraits cannot be made as substitutes for the earlier studio-portraits, but that in them the characteristic charm of the "compressed chamber-lighting" must be made expressive.

When one also considers that a person goes to the photographer with the special object of getting his portrait made, and not to have a chat with him on this or that weighty subject, so it is doubtless true that the sitter will feel much more at ease in a living-room used for making portraits, than he would in a studio whose super-

abundance of light has a bad effect on sensitive papers.

But however beautiful and lifelike the peculiar lighting of the living-room may appear to the eye of the intelligent observer, it is nevertheless very difficult to bring the widely differing tones of the highlights and deep shadows into a printable and expressive negative. The tone is printable because it is really comparatively easy to produce a negative that will bring out all these tone-scales by proper lighting, whereas it is infinitely more difficult to keep the negative so within the range of tones, that the positive on paper will also reproduce all its fine points. What that means, we shall see later.

A negative with a short scale of tones is required by every photographic printing-process on paper, and so it is necessary in the first place to fulfil this requirement. The accomplishment of the task will be all the easier, the softer we have the lighting of the subject, the background and the accessories. With a suitable placing of the sitter in the room, diffusing-screens, reflectors and skillfully arranged artificial lights are the outfit of the at-home photographer, with which he must master his task. How these auxiliaries are to be used, depends upon the actual exceedingly variable conditions under which the photograph is to be produced; but it seems impracticable to write exhaustively regarding these matters in a magazine-article.

But it is not often that the means to produce a sufficiently soft lighting are available; it is also often pleasing to bring direct, interesting and expressive lights and shadows into the picture. In such cases many of our dryplates fail, that have gained a good reputation in "normal" exposures in the studio and in the open air. The at-home photographer then makes the discovery that the same plate which in the studio gave excellent negatives is more or less unusable when making portraits in strongly contrasting lights. For instance, if one exposes for the fine gradations of tone in the highlights and clear halftones, the dark tones and shadows will be clear glass, and will therefore give the print a pitchy, unnatural depth. But if one exposes long, according to the old rule, with a view to the dark-toned bodies—a rule that has little to recommend it in portraits, as "joggling" and an unpleasant set look in the eyes are apt to result—the fine shadows run into the highlights and the flesh-tones are lost, which is even worse than underexposure.

We need unconditionally, therefore, for at-

home photographs with strongly contrasted lighting, a plate whose curve rises gently, which we denominate "soft-working." More correctly speaking, one should say that the plate should develop softly, for softness is generally a result of the developer or the method of development used. Not every plate will permit hard or soft development at will, without having undesirable features appear. Technically speaking, the curve of the plate used must by proper development within certain limits be flatter or steeper without otherwise suffering a change of form.

Experienced at-home photographers use, not without reason, thick-coated and, where possible, yellow-colored orthochromatic plates, because they know well that these, with a more correct reproduction of color-values in the one-color tone-scale, also give soft negatives when sufficiently exposed, without having recourse to special developers or methods of developing. We would here again point out that the old pyro-developer is excellent for such pictures. Its adaptability can scarcely be equalled by the modern developers. Also the newer Neol, whose only disadvantage is in being less durable, proves itself to be very good on account of its property of working uniformly and bringing out the details in the strongly lighted parts of the negative.

But finally the negative is always only the means to the end. It may appear extraordinarily good to the eye, and yet the print may not fulfil our desires. By the use of suitable paper, however, we can generally obtain satisfactory prints from negatives with a long tone-scale; pigment-paper also, of a brown color, sensitised for the purpose with a high percentage of bichromate, will bring us to our object; but this fine printing-medium does not always fulfil the promise made for it. Let us think, however, of the press-photographer who often has to get pictures of celebrated persons under very difficult conditions of lighting. He has not much time to spend on printing-out prints and, therefore, generally falls back on developing-paper. In this case it is really extraordinarily difficult to reproduce in some degree the tones of the negative. If one wants to make his negative suit his paper, the only thing he can do is to have recourse to ammonium persulphate. This, however, in spite of all efforts to remedy the defect, is capricious in its clearing effect. One time it works faultlessly, reducing properly the strongly covered parts of the negative without changing the more transparent parts; another time it refuses absolutely to bite at all, or else it dissolves the silver in spots in the heavily covered portions without troubling itself in the least about the "drawing." Regarding this latter appearance—

which is doubtless the most disagreeable feature in the use of ammonium persulphate—there has not been to my knowledge any scientific investigation of it; and yet a knowledge of the cause of this action is very necessary, because it often results in the loss of the negative. Naturally, one will not care to risk a valuable negative in such an unreliable expedient; it therefore only remains to re-copy it by making a diapositive or by preparing a softer negative by means of the bichromate process. But in the end all these methods are troublesome, time-consuming and expensive, so that it will be preferable to use the pigment-process in such cases, or a soft-working printing-out paper.

The artificial-light papers have doubtless brought a change for the better of late years, as more and more soft-working emulsions are brought out, which, while not having the "wooliness" of the bromide papers, generally have a tendency to develop of a brownish-black color, and are usually spoken of as "portrait" papers, perhaps because the portrait-photographers—who before the war were almost without exception partisans of the printing-out paper—found this paper suitable for their comparatively contrasty negatives and a measurably good substitute for the printing-out paper for which it was almost impossible to get gold or platinum salts that were necessary for toning.

But the at-home photographer must have still softer-working developing-paper than most of the portrait-papers, for, in spite of all the tricks of development, he will often obtain only negatives whose scale of tones is much too extended, even for the softest portrait-paper.

One need only lay such a contrasty negative with clear-glass shadows with coated side on a sheet of pure-white paper to perceive how much is lacking in all the tones. This test is also instructive in other ways. It shows us, for instance, into what a small section the entire tone-scale must be compressed when the negative is to be printed on developing-paper; nevertheless, all the gradations from highlights to deep shadows will be reproduced. That the "freshest" of the picture must suffer considerably by this compulsory compression of the tone-intervals, and that it suffers still more from the use of a deep-mat coating and a yellowish-toned paper that shortens the gradation, is self-evident.

Artistry without exact knowledge of the technical fundamentals is dangerous in all fields; but particularly so in photography, and in at-home pictures especially, a thorough acquaintance with the fundamentals of technical photography is required, if the results are not to be failures.

Atelier.



EDITORIAL



Operating-Room or Studio

IT is well that *Abel's Weekly* urges the abolition of the term, "operating-room," as applied to the photographer's studio or the place where the camera-sittings are made. The Editor—whose connection with photography in general dates back to the eighties—remembers that even in those days objection was made to this suggestive, ill-sounding designation. Of course, the term "operating-room" had no allusion to the apartment in a hospital where surgical operations are performed, nor did it suggest, even in a humorous way, the tortures the sitter was supposed to undergo when his head was held steady by the cold, firm clasp of the iron head-rest. To be sure, the obnoxious term doubtless derived its significance from the photographer's physical exertion in operating the camera, which, in the early days of the art, often was an apparatus of formidable proportions. Does any one remember Tom Burnham's huge portrait-camera capable of making direct, full-length life-size portraits? It was an enormous affair, requiring six-foot dryplates—made to order. Merely to demonstrate its capacity, Burnham—a man of over six feet in height—slept several nights in his gigantic home-made camera, lying at full-length within the extended bellows!

The Editor has always agitated against the use of the incongruous and ill-sounding "operating-room," which, it seems, still prevails among old-fashioned studio-proprietors in various parts of the country. The protest of *Abel's Weekly* against the continued use of this odious word is commendable, and should be supported by the entire American photographic press until it has been eradicated. The term, "gallery," was used interchangeably with "operating-room," because with its array of tall, vertical windows it was reminiscent of an art-gallery like the one of the Louvre or the Vatican; but with the coming of the improved studio with its reduced glass-area, overhead and at the sides, the once acceptable term became obsolete."

As a matter of historic interest, the subject of abolishing the term, "operating-room," was brought up for discussion at one of the photographers' national conventions, thirty years ago, and the short and more appropriate term, "studio," was suggested. It found instant favor

and was adopted by many portrait-photographers, although, used in a broader sense, the term came to be applied to the entire establishment—either a detached structure or a series of rooms in an office-building. And yet, when some one calls at the desk and asks for the proprietor, he most likely will be told that he is in the studio making a sitting, or in the darkroom developing plates. After all, then, the "studio" is the workroom of the artist or of the photographer.

Foreign Camera-Exchanges

THE purchase of used cameras from dealers advertised in European photo-journals is not always to be recommended. If the transaction is conducted, on the spot, by a shrewd and discriminating friend, the buyer assumes little if any risk. A mutually satisfactory arrangement can usually be made, should the purchased article not prove as represented. If, however, the purchase is made by correspondence, and the dealer is disposed to take advantage of his American customer, difficulties are likely to arise. In this connection, the purchaser should consider whether or not the journal in which he saw the advertisement assumed any responsibility. Although most newspapers and periodicals do not guarantee the integrity of their advertisers, there are some which adopt just the opposite course; yet we know of cases where non-discriminating publishers have indemnified persons who have been treated unfairly by their advertisers. But this is the policy adopted by publishers who guarantee their advertising. The following case of unfair treatment by an advertiser in a foreign publication is one of peculiar interest. One of our subscribers saw the advertisement of a German camera, specified as brand-new, in a certain English publication. Knowing the latter to be highly respectable, he sent the required amount to the advertiser and received the camera, which, however, was of the Ersatz type (war-model) covered with paper, instead of good quality leather as formerly. He explained the situation to the publisher, who calmly informed him that he did not know the advertiser and that he, the purchaser, merited little sympathy, inasmuch as he had bought goods of German manufacture!



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface are not suitable for reproduction, and should be accompanied by smooth prints on P. O. P., or developing-paper having the same gradations and detail. All prints should be mounted on stiff boards.

3. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.**

4. **Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. Be sure to state on the back of every print exactly for what competition it is intended.**

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Winter-Sports Competition Closed January 31, 1921

First Prize: A. Van.
Second Prize: Alexander Murray.
Third Prize: Kenneth D. Smith.

Honorable Mention: George W. Gould, Ralph R. Hall, Ozan K. Nunome, John Smith, William J. Wilson.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.
"Home-Portraits." Closes February 28.
"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)
"Home-Scenes" (Interior). Closes April 30.
"Street-Scenes." Closes May 31.
"Summer-Sports." Closes June 30.
"Summer-Flowers." Closes July 31.
"Shore-Scenes." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Architectural Subjects." Closes October 31.
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

IN deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.

Competitors Should Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know?

This is often the reason why careless entrants wonder what has become of their prints. Let them be more careful in the future. We will do our part, gladly.

We are eager to make these competitions of practical value and benefit to every entrant. However, to serve each one to the best of our ability, we must have the necessary information. By following the rules, the advanced worker or the beginner will derive greater benefit from participation in these competitions and will enable us to be of greater service.



OVER THE TOP

A. VAN

FIRST PRIZE — WINTER-SPORTS

Judging Competitions

THERE is no doubt that many readers are interested to know something of how photographic competitions are judged, and the following account from *The Amateur Photographer* should be of interest and value.

"When one reads of a competition with over twenty-three thousand entries, there is a very natural desire to know how the judges tackle so vast a number of prints, and the exact method adopted to find the best work among them. It has been described as a 'difficult' task; but such a term is not quite correct. That it was a very onerous and tiring one, every one can believe; but mere numbers do not make judging difficult.

The division into classes lightens the task very greatly of those who have to make the awards. Manifestly it is much more difficult to compare the merits of a portrait, an architectural interior and a landscape, than it is of different portraits only, or different landscapes only; and classification, therefore, makes judging much more simple.

In all competitions with more than a dozen or so entries, which can be spread out so that all can be directly compared at once, there has to be a preliminary selection, sometimes several successive selections, before the final awards are made. In the Kosmos competition, the first selection left over a hundred prints in some of the classes; these were gone through again so as to obtain fifteen or twenty of the best, which were reduced to ten or a dozen for the final judging. The first selection is necessarily the easiest; it is the final stages that take the time, and call for a very careful weighing up of the competing entries. It was very noteworthy after the preliminary rounds to find how the work of the same few competitors came right through in each class, not by themselves, of

course, for there were always some of the best pictures by competitors who had only entered for one or two classes; but the way in which the practised hand kept cropping up, might have done much to convince some of those who sent in a great many prints that the competition was strictly one of skill, and not of chance.

Another point on which we should like to lay stress is that in a competition like this, where every print is looked at separately in the hand, little prints have as careful consideration as big ones. Some very small pictures took awards; at least one first prize and several others went to prints $3\frac{1}{4} \times 4\frac{1}{4}$ size or less, and one winner measured not much, if any, more than 2×1 inch.

We emphasise this, because the belief that a contact print from a small negative 'stands no chance' is curiously widespread; although with practised photographic judges it can have no basis whatever. More awards go to large pictures, it is true; but this is only because the photographer who has reached a certain degree of skill usually likes to enlarge his work, and therefore enlargements are more numerous among the pictures by advanced workers. But when a little print has the quality, it is just as certain of recognition as if it measured feet instead of inches.

The same thing applies to the various processes that may be employed in making competition-prints. There are many workers who have the idea that only the highly finished and 'controlled' print is likely to appeal to the judges. This is quite a fallacy: the good pictorial composition that is rendered adequately in 'straight' photography and shows artistic perception in the result is as sure of recognition as any picture produced by one of the 'fancy' processes that call for much skilful handwork. So that in this respect the



TRYING OUT THE OLD SAND-PIT

ALEXANDER MURRAY

SECOND PRIZE — WINTER-SPORTS

beginner who can produce clean work and has a good idea of the essentials of a picture stands as great a chance of winning a prize as the most advanced worker."

Prints for Reproduction

THERE are still many photographers, both in portraiture and commercial work, who are under the impression that a brilliant, somewhat hard print is necessary to obtain the best results in halftone-work, says a British cotemporary, and as they never come into direct communication with the engraver they have no means of learning that they are in error. The modern engraver will tell you that for high-class halftones he prefers a soft print full of gradation, but free of flatness. In the making of the screen-negative and in the various stages of etching he can introduce highlights into a rather soft subject, but he cannot produce detail in harsh lights and shadows. If the original negatives are on the hard side, full exposure and the use of a diluted developer will give the most useful prints. For reproduction, the color of the developed images is of little account. A rusty black,

due to short or weakened development, will often reproduce as well as a pure black tone. Sepia-toned prints should never be submitted for reproduction, as the shadow-detail can hardly be preserved in the block. Purple-toned printing-out was at one time considered as the only suitable medium, but glossy or carbon-surface bromides now seem to be preferred.

Printing-Efficiency

ALTHOUGH electric light is now obtainable in most towns, there are still some photographers who are obliged to use gas, or oil, for exposing Bromide and Gaslight papers. The question of exposure is so important, that we think a few suggestions on the subject may be helpful to our friends.

Dealing first with Bromide-printing, we find that there is a tendency among some printers to use an exposing-light (electric) which is far too powerful, necessitating very rapid exposures. In some cases, this is done to "speed up" the work; but we doubt that there is any advantage in quickness when we take



SKI-ING IN FRANCONIA NOTCH

KENNETH D. SMITH

THIRD PRIZE — WINTER-SPORTS

into consideration the time occupied in reprinting "spoils." It is easy to make a 50 per cent error in very short exposures, and we strongly advise printers to screen down the light, or use a lower candle-power lamp, so that the exposures average three to five seconds. Those who print in strips, will appreciate the point of correct and even exposures.

Exact data as to exposure cannot be given, as there are so many factors to consider; but a great deal of help can be obtained if the negatives are graded by the printer, himself. He should also choose the grade of printing-paper. When possible, the grading of negatives should be done in daylight, so as to make allowance for the color of the image. Printers will find this task very difficult in cases where, owing perhaps to a careless assistant, less than the usual amount of sulphite has been put in the pyro-developer used for the development of the negatives, thus causing the image to be of a yellowish color.

In printing by electric light, the exposing-box should be fitted with a switch which is worked either by the foot, or by the contact of the pressure-pad. The switch must be of a definite make-and-break type, somewhat similar to the ordinary house-switch; but we do not recommend the type of switch that is inclined to "arc" or burn up. The exposing-box should have a "spy-

hole," so that the printer can be quite certain of the correct action of the switch. It also acts as a guide in counting the exposure-seconds. In some towns, the electric light loses some of its intensity about the time when theaters are lighting up, and allowance must be made for this.

Printing on gaslight-paper offers no difficulties to those who have electric light; but the printer who has only gas or oil at his disposal can use daylight by fitting up a room with a simple exposing-device.

A window can be blocked up completely, with the exception of a space of about twenty inches square, and against this space can be put a printing-box open at the back but containing a reflector at an angle of forty-five degrees.

There should also be a reflector outside the window at an opposite angle to the reflector in the printing-box. The exposures should be made by a shutter similar to the roller-blind shutter.

In conclusion, we would remind our friends that the first essential in Bromide-printing is correct exposure, and every possible device or precaution should be used to ensure correctness. In Gaslight-printing, which has been prophetically described as the "contact-paper of the future," there is more latitude in exposure.

Rajar, Ltd.



SUBJECT FOR NEXT COMPETITION ADVANCED WORKERS



IN MUNICH

RICHARD PERTUCH

Advanced Competition—Street-Scenes Closes May 31, 1921

It has been my experience that very often true progress depends upon a clear understanding of the purpose or aim we have in mind. Obviously, in the present competition we are to make pictures of street-scenes; but what is a "street" and what is a "scene"? For a moment, let us consult Webster. According to him, a street was "originally a paved road; public highway; now, commonly, a thoroughfare, especially in a city, town or village; especially a main thoroughfare as distinguished from an alley, lane, or the like. *Street* usually includes the sidewalks or foot paths on either side, except when used in direct distinction from them, and often also includes the bordering dwellings, business-houses, lots, etc., which are then often spoken of as *in the street*; as, he lives on, or in *Main Street*."

Now, with regard to a definition of scene. It may be several things in art, literature and human affairs; but as related to the present case, Webster defines it as "a landscape, view or prospect." Hence, a street-scene is not necessarily confined to the city or to the country; it has many possibilities pictorially as the thoughtful consideration of these definitions will reveal.

In the making of street-scenes, the hand-camera comes to its own. It should be apparent that a view-camera and a tripod are out of place, especially in cities and towns. The many vest-pocket cameras are excellent and, in some respects, more to be desired than a postcard-size hand-camera. In most cases, the

worker has little opportunity to compose the picture with regard to the human element involved. Rather, he is in the position of a hunter who lies in wait for the game to come within range. Of course, the camerist may compose the picture with regard to buildings, trees and other fixed objects; but he must lie in wait for the psychological moment when the human element composes itself in harmony with the other features of the scene. For this reason, a vest-pocket or hand-camera is the equipment to use. There must be quick action the moment that the scene composes itself as the worker would have it. A reflecting-camera is also an excellent outfit for the purpose. In fact, any type of camera that may be manipulated quickly and accurately is the one to be preferred.

Although rapid rectilinear and even meniscus-achromatic lenses may be used successfully, an anastigmat lens is to be preferred. The exposure must be quick enough to "stop" motion and, yet, ample enough to obtain the full values in the shadows and highlights. The anastigmat lens, used properly, will enable the camerist to obtain the technical qualities in the finished print that are so necessary to a *good* picture. Of course, technical proficiency alone will not win a hearing from the jury; there must be artistic merit as well.

From the definitions of Webster, it may be seen that a street-scene is not confined solely to the conventional portrayal of a "city-canyon" such as so often comes from New York City. True, this city has street-scenes which cannot be duplicated anywhere in the world; but it does not follow that the Main Street in a country-town is one whit less a street-scene. In

fact, a state-highway out in the country is a street, according to Webster, and this should be remembered.

To what extent the human element is needed to make a street-scene successful, is a debatable question and one which the individual worker will have to decide for himself. Naturally, there is a great difference as to the number and arrangement of figures in a street-scene in the city or in the country. Broadway in New York City, early Sunday morning, is almost as devoid of human interest as a country-town; and, hence, such a portrayal of it would not be a true representation of this famous street. On the other hand, Main Street in any New England town on town-meeting day, when it is filled with hundreds of voters from miles around, is not a true picture of the normal appearance of Main Street. In both cases, the human element is overdone and we become more interested in the persons than we do in the street and, hence, we have lost the point of the competition—street-scenes *not* outdoor-genres.

Those who contribute pictures to this competition should take care to note that there is a similarity between certain kinds of street-scenes and outdoor-genres. A safe rule to follow is to make sure that the human element in the composition does not hold the interest to the exclusion of the main object, viz.: a picture of the street, *not* the persons in it. A true portrayal of Fifth Avenue, New York City, should include motor-buses, automobiles, traffic policemen and pedestrians. However, not one of these groups, or all together, should hold the attention to the exclusion of the buildings on each side, the sky-line and the other characteristics of this famous thoroughfare. William S. Davis—and other well-known contributors to the pages of PHOTO-ERA MAGAZINE—may be credited with several excellent pictures of Fifth Avenue as so many of us know it to be. A study of these pictures will reveal my point with regard to keeping the human element subservient to the physical features of the street to be photographed. In this competition, as in every one that we conduct, fidelity to fact is vital to success. Whatever street is selected to be photographed, the camerist should determine the best time to make the exposure so that he may feel assured that he has made a picture of *his* street at its best.

A moment's thought will convince the ambitious worker that a street, as defined by Webster, is a wonderful subject—one that will lead cityward or countryward with equal facility and charm. I remember that as a boy a street or road held a peculiar fascination for me. In some strange, inexplicable manner that long, straight road ahead of me led on and on to countries, places and people that were filled with mystery and bewitching romance. In my mind's eye, I beheld foreign nations, princes, robbers, pirates, knights, fair ladies, castles, ships—all just around the next bend of the road or just over the top of the hill. Yes, they were boyish fancies; but to this day that fascination of the long highway still exists in my heart.

Frederick B. Hodges, in his beautifully illustrated article, "The Road," in July 1914 PHOTO-ERA MAGAZINE says, "The Road! the very words call up responses from deep within my heart. The soft brown way to the 'silent places'; the leading path to nature's treasures; I roam over it under the pearly sky of morning, the dazzling sky of day, the colorful sky of evening and the star-filled sky of night. . . . The fascination of the road is one peculiarly its own, and, although not strictly a part of nature, it is strongly linked with the picturesque, and for the camerist and pictorialist it is richly attractive."

On several occasions I have called attention to the importance of letting one's imagination run away with itself for a time. It is a form of mental gymnastics—to say the least—that re-acts to the advantage of the camerist. It is all very well to point out the importance of technique; but let us remember that technique without a heart is cold and lifeless. Music offers too many illustrations of this very thing for me to take space to point them out. The dreamer's lot is a hard one at the hands of his practical, work-a-day neighbors; but where would painting, sculpture, literature, drama and photography be without him? Of course, there are extremes; but I venture to say, that a little of the dreamer in all of us would give us a vision that our practical experience should temper to present-day understanding and appreciation.

In making pictures of street-scenes, it will be to the advantage of the camerist to plan ahead. That is, to decide in his own mind the particular feature of the street that he wishes to emphasize to the exclusion of all else. To return for the moment to our example of Fifth Avenue, the worker should come to some conclusion with regard to what he considers to be an outstanding characteristic of this well-known avenue. Is it the motor-buses, the long lines of automobiles, the efficient traffic policemen, the pedestrians, the architecture of the buildings, the sky-line or what? Which of these should be subordinated in order to throw the center of interest toward the proper place in the picture? In short, what is the most striking characteristic of Fifth Avenue as a street? Perhaps, a method of elimination would be easier. How many of the characteristics already mentioned could be omitted and still leave a true portrayal of Fifth Avenue? We could not neglect the motor-buses, traffic-policemen, automobiles and pedestrians and still have Fifth Avenue. Let him who thinks otherwise, try it. Of course, a picture might be made early in the day when there is virtually no traffic and few pedestrians are abroad. In a sense, it would still be Fifth Avenue; but would it *really* be the famous avenue at its best and as thousands know it? Would Wall Street and the Stock Exchange appear natural to the observer if the street were devoid of its hurrying crowd?

Again, a street-scene should portray what the camerist admires or loves in a certain street. A moment's thought will enable him to recall memories and associations which are very closely related to a street in the city or country. Perhaps, it is the familiar old street that passes the boyhood-home or the house of a loved one. Again, it may be a part of the street that passed the old church before it was torn down to make way for the present modern building. The street may remain as familiar as of old, despite its new surroundings; and, therein lies its interest and value to the camerist. As I have already intimated, do not be afraid to let sentiment enter into the making of a street-scene. There is enough of hard, cold facts in everyday-life, so that when we come to photography we should permit our dormant love of the beautiful, romantic and sentimental full play and curb it to the extent required by common sense and good taste.

We cannot resist the opportunity to say, in conclusion, that the number of entries in these competitions is growing rapidly and that ambitious amateur and professional workers who are well-known, appear to consider it a pleasure and a benefit to enter their pictures regularly. Remember that we aim to make these competitions of practical value and a real help to each earnest worker who seeks to make the most of photography.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper are not suitable for reproduction, and should be accompanied by smooth prints on P.O.P., or developing-paper having the same gradations and detail.

5. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.**

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. **Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. Be sure to state on the back of every print for what contest it is intended.**

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition

Closed January 31, 1921

First Prize: Kurt J. Herzer.

Second Prize: John J. Griffiths.

Honorable Mention: Carl S. Davis, Charles Harter, Paul H. M. Vanderbilt.

The Beginner and a New Camera

IN this little article I am going to assume that the beginner has a new camera. Furthermore, I am going to assume that he had it given to him and that up to the present moment he has had neither the time nor the inclination to make more than a very few pictures. Spring and summer are at hand. Can our beginner manipulate his camera effectively and is he prepared to enjoy his photographic work during the coming summer-season?

No doubt, some of my readers are surfeited with my oft-repeated assertion that it is the *successful* amateur-photographer that enjoys photography and makes true progress. Nevertheless, my own experience has taught me the truth of this statement, and it is one that every beginner will do well to remember and to consider. After all, is it not true to human nature? How many of us would play tennis, golf, whist or swim, dance and sing, if we could not do these things with some measure of success? The poor tennis-player or poor dancer is not so welcome, nor does he have so good a time as the man who is proficient in both. Why should it not be equally true with regard to the amateur-photographer?

My suggestion to the ambitious beginner would be for him to sit down some evening with his camera in his lap and the instruction-book by his side. Then, to look at his camera slowly and carefully. As he comes to some lever or mark that is unintelligible to him, he should consult the instruction-book and *digest* what he reads. This done, let him continue his examination until there is not a part of the camera, inside or outside, with which he is not familiar and able to manipulate intelligently. I cannot emphasize too strongly the practical value of the instruction-book nor the importance of its *repeated* study.

Now, let us assume that the beginner is able to handle his camera with reasonable proficiency. Very well; the next step is to put his knowledge to a practical test. Upon the first favorable day, he should go out with it to a place where he can find suitable and varied subject-material. First, he should make a landscape; second, a picture of a friend; third, a group—if one may be obtained; fourth, a dog, cat or pigeon; fifth, a street-scene, and, sixth, some house or building. As he makes each exposure, the beginner should make an accurate record of the diaphragm-opening, shutter-speed, number of feet at which he set his focusing-scale, weather-conditions, time of day and any other data that will help him or some friendly advanced worker to correct such mistakes as he may have made. The six pictures I have suggested are not arbitrary, but are given merely as hints. A six-exposure roll of film thus used will save many times its cost later on. Although the beginner will profit by



PORTRAIT

KURT J. HERZER

this practical test, he will be even better prepared if he does his own photo-finishing. In short, in that event, he can see the results of his proficiency—or lack of it—from the exposure through to the finished print. PHOTO-ERA MAGAZINE encourages and advises every amateur photographer to do his own developing, printing and enlarging. Not solely for reasons of economy and convenience, but because he will get more pleasure and profit out of photography.

One of the encouraging signs of the day is the awakened interest in the practical value of membership in a good camera-club. The spirit of fraternity which characterises so many of our present-day camera-clubs makes it possible for the beginner to feel perfectly at home in the company of those who are many years older than he, photographically. The value of friendly, constructive criticism cannot be over-estimated. Moreover, from a financial point of view, the beginner may enjoy almost unlimited facilities at a cost which is very moderate. I am happy to say that the new spirit of cordial, brotherly friendship which is now becoming so apparent in camera-clubs, is doing away with the old idea of relentless criticism of the work of another—no matter what the cost may be in friendship, loyalty and good feeling.

In cases where the beginner is so situated that he cannot avail himself of the privileges of a good camera-club, the next best step is to make the acquaintance of an advanced amateur or professional photographer who is willing to devote a reasonable amount of time to the guidance and encouragement of the beginner who is sincere and eager to make progress. However, as I have pointed out before, the beginner should not lean too heavily upon his photographic friend; that is, to the exclusion of the self-determination of his photographic career. It is well to accept all advice with courteous thanks; but, in the end, the beginner who wins out is he who stands upon his own photographic feet. In photography, as well as in other pursuits, individuality, when it is tempered by good judgment and taste, is to be encouraged. Our well-known pictorialists are examples of the value of individual expression.

Therefore, with the summer-season close at hand, let the beginner prepare himself to enjoy his camera and to feel a quiet satisfaction in his photographic work because it is *good* and a pleasure to himself and others. Let him aim high in photography. It is worth it!

A. H. B.



"PICK ME A BLOSSOM!"

JOHN J. GRIFFITHS

Old Lenses and Spherical Aberration

In these days of high prices we hear of many photographers who are tempted to purchase an old-fashioned long-focus rapid rectilinear lens, using only the center of its field in preference to paying the higher price for a first-class anastigmat. Quite apart from the wisdom or unwisdom of this, says *The British Journal*, there is, however, one caution that should be given to the user of one of the older rapid rectilinear lenses, if he would avoid unsharp negatives, by reason of the lens being uncorrected for spherical aberration; that is to say, the peculiarity of some of these instruments often being of different focus at different stops. The older photographer used to lenses of pre-anastigmat days, will doubtless be fully aware of this, but the warning is necessary to those whose experience has been limited to the more modern, well-corrected instrument. When using an untried rapid rectilinear lens, particularly if of an old pattern, the image upon the groundglass should be carefully examined with the stop that is to be used when making the exposure in position, since the alteration of the stop may have the effect of making a previously sharp image decidedly unsharp. Nor is lack of correction for spherical aberration entirely confined to the older rapid rectilinear instruments, for we have found it present in a lesser degree with some cheap instruments of more recent manufacture.

Modern workers are so unused to looking at the effect of stopping down, in affecting the sharpness of the image adversely, that a caution in the matter is not out of place.

Submarine Photography from Airplanes

Writing in the *Geographical Review* on the subject of aerial photography as an aid to geography, Mr. Willis T. Lee, of the U.S. Geological Survey, deals at length with the application of this process to photographing and mapping submarine-features. The visibility of objects at great depths in clear water from a point far above the surface has been a well-known phenomenon since the wartime period of "sub" chasing by airplane. It is said that objects forty-five feet under water have been successfully photographed, and that with the proper plates and light-filters the presence of submerged objects invisible to the eye is revealed by the camera. It has been found possible to use this method of observation to some extent in detecting and mapping sand-bars, shoals, drowned terraces and channels. Mr. Lee presents several photographs illustrating the results of the method. Not all photographs of coast lines reveal these subaqueous features. Certain conditions of the atmosphere and the water seem to be necessary for photographing them.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Density of Panchromatic Plates

TALKING with a photographer some time ago, we were somewhat amazed to learn that he considered it a difficult matter to develop a panchromatic plate satisfactorily unless tank-development was adopted, which he was averse from doing. His idea was that it is a matter of more or less difficulty to judge of the density of the negative in the very feeble light of the darkroom. It should be pointed out, remarks *The British Journal*, that this difficulty is more imaginary than real. Our own plan is to handle the plates as far as possible in complete darkness, when filling or commencing development; when this operation is judged to be about half complete, there is certainly no harm in examining the plate by an ample safelight; for by that time, the emulsion is very greatly desensitised, and there is little fear of fog. We do not wish to infer that liberties may be taken with panchromatic plates in this direction, but rather to point out that provided reasonable care is taken no harm will result in exposing the plate to safelights for even longer than the average photographer takes to judge the density of a negative.

Printing with Primuline

COMPARATIVELY few photographic processes lend themselves to the production of prints on fabric; but that which is known as the "Primuline-Process" is very applicable to silk, cotton, or similar materials. It is not so suitable for printing landscapes, portraits, or similar subjects; but for simple decorative designs with leaves, ferns, and such like, the method can be used very effectively.

If a piece of silk or cotton is dyed with primuline, and is then immersed in a solution of sodium-nitrate which has been acidified, a diazo compound is formed in the fiber. This compound is destroyed by the action of light, and also couples to form a range of colors when "developed" with suitable intermediates. If the dyed and diazotised material is exposed—dry and flat—behind a pattern until those parts which are exposed have had their diazo-compound destroyed, on developing we get only color in the parts which have been behind the pattern. By this means table centers and other articles can be made.

The material having been cut to the required shape is dyed by immersing it in a solution of primuline of a strength of ten grains to the ounce of hot water, and boiling for a few minutes. It is then rinsed and put into a cold acidified nitrite-solution, in which the yellow fabric will probably turn to a golden color. The nitrite-solution may consist of twenty grains of ordinary commercial sodium-nitrite—not nitrate—dissolved in ten ounces of water, one dram of hydrochloric acid being added when the nitrite has dissolved. The material after diazotising should be pressed between blotting-paper and dried in the dark, without using heat.

For printing, the pattern required should have been previously cut out or arranged as required. A few small strips of material should have been treated in the same way as the big piece to serve as exposure-

guides. When all is ready the exposure is made to daylight. Unless a large enough printing-frame is at hand, it is convenient for large work to use a plain piece of glass. The pattern is put on the fabric and the glass is laid on the top, backing of cardboard being placed behind the sensitive material. The whole should be subjected to pressure to ensure as sharp a result as possible. The same pieces of fabric are exposed at the same time, and should be developed after successive periods to serve as a guide. I suggest for a bright clear day ten minutes as suitable intervals at which to remove the test pieces. The printing must be continued until no color is obtained on developing.

There are a great many developers which can be used in this process, among which are the following, all of which are to be used in an alkaline solution. Caustic soda or caustic potash can be used for this purpose, by dissolving the developer in water each ounce of which contains five grains of the caustic alkali.

Alpha naphthol	Purplish red
Meta-phenylene-diamine	Brown
Aminoazo benzene	Red
Naphthol A.S.	Brown
"R" salt	Orange

Of these I prefer alpha naphthol, because of the pleasing color which it gives. It is also easier to obtain than the others.

When the exposure is finished, the fabric has merely to be developed by placing it in a solution of one of these substances, and then rinsing it well. It can then be dried and ironed out, and the article is finished.

When the process was first published there was some hope of obtaining black or brown-black tones with it, so that it might be possible to use it for printing on paper or glass in the ordinary way. Eikonogen was suggested as the developer for such a color, but no such application was made. There is no reason, however, why for experimental purposes a sheet of glass covered with a film of gelatine should not be dyed with primuline, treated with nitrite as just described, and then printed and developed.

L. C. JOHNSON, in *The Amateur Photographer*.

Photometry and the Purkinje Effect

A PAPER on this subject by F. E. Ross, of the Eastman Research Laboratory, appeared in the *Astrophysical Journal*. According to an official abstract, a British contemporary reports the increase in diameter of a star's image is proportional to the logarithmic increase of exposure-time, and it is proposed that when this is measured with an artificial star the coefficient of increase shall be called the *astrogamma* because of its analogy with the factor which is termed *gamma* in photographic work. Both *gamma* and *astrogamma* are dependent upon the wave-length, and photometric measurement of stars made photographically must take into consideration this variation of *gamma* and *astrogamma* with wave-length. These effects are considered in the paper. Some results obtained with long exposure where the light source is very weak are also given. The theoretical considerations involved are dealt with here.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

MUCH skill is shown in dealing with a rapidly moving object, the detail and perspective in the seaplane being well rendered, though it is unfortunate that the tail should appear to be tied to the tree at the left-hand side of the picture—the effect being emphasised by lack of aerial separation between them, due to uniformity of tone.

In composition, this, like many another picture, possesses division of interest, since the observer is left in doubt as to whether it is a study of a plane in a landscape-setting, or a landscape with plane, there being the elements for two distinct compositions. As it stands, the foreground competes with the plane for attention. Removal of most of the foreground, and inclusion of more material on the right, would have concentrated attention upon the plane and conveyed a feeling of greater space for it to fly in. Without the plane, the landscape-material affords a pleasing composition, which would, however, be still

further improved by the introduction of some atmospheric quality in the far shore, and suitable clouds in the sky to balance the tree-mass at the left.

W. S. DAVIS.

THOUGH there are two apparently conflicting centers of attraction in this picture, namely, the airplane and the river-scene, these two elements may quite properly be included in the same composition to carry out the idea that might be expressed in some such title as "The Intruder." Such a title is suggested by the suddenness with which the plane has swooped down into the peaceful, pretty scene. This idea is well carried out by the bank of foliage at the left suggesting seclusion and the airplane just emerging from behind it.

These two elements could not well be separated in this picture. The removal of the airplane would leave an objectionable rectangular gap in the sky, and on the other hand the removal of the attractive part of the landscape would leave little more than a mere machine.

The arrangement of the objects in the picture is on the whole very good. The outlines of the airplane though striking are in harmony with the main lines of the landscape converging as they do towards the



THE PICTURE CRITICISED THIS MONTH

right, and the generous sky-space ahead of the flier is pleasing. The lower outline of the fuselage is a bit harsh in its sharpness. The dark band along the left edge of the picture might be freed of its slight monotony by a patch or two of lighter tone, and undue attention released from the lower left portion of the picture by slightly softening the detail in this vicinity.

RALPH A. SMEAD.

THIS is quite a good and attractive speed-picture, and in my opinion there is only one prominent fault about it, and that is that the hydro-aeroplane is too near the foliage. If the maker of this picture had pointed the camera far enough to the right to clear foliage and then made the exposure with the machine the same distance from the margin as it is in this picture, the result would have been a perfect picture, in my estimation.

As to the background, I think it is about as good as any, because of its tone-values. The shadows are not so deep as to bury the fine details of the foliage near the water. This picture would stand trimming about $1\frac{1}{4}$ inches off the bottom as it is at present.

E. VON TILZOR STRUTHERS.

LOUD and continued applause! To obtain a fully-timed negative of so rapidly moving an object as near to the camera as was this plane, using a lens stopped to F 8, is no small achievement.

Whether the just-right position of the airplane, with plenty of space left in front wherein to move forward without bumping its nose on the right-hand

margin, is the result of the spacing in the negative, or whether it is the result of trimming is immaterial; it shows excellent judgment.

Distribution of masses is good; tone of sky is correct; there is detail in shadows. Perhaps one might wish the distant shore to seem more distant—to be lighter in tone; and without any disparagement of the picture, one may wish for a reflection of the plane in the water; but one cannot have all things.

BERT LEACH.

The O. C. C.'s Scored Upon

WHEN we selected Mr. Coulson's hydro-plane-picture, we did so by way of an experiment. To our amazement not one of Our Contributing Critics appears to have detected a clever technical feat. The picture is the result of double printing! A moment's thought should have convinced our good friends that, usually, a plane in flight could not be photographed at such close quarters with such a generally pleasing result with regard to even exposure, focus and composition. Let the O. C. C.'s be on their guard in the future!

Supplementary data—though of a sad character—with regard to the picture criticised, have been received from the photographer, Mr. M. A. Coulson, as follows: "Since my last writing, we have received word that our pilot was killed in a nose-dive into the Mississippi River from the same hydro-plane (hydro-aeroplane) as shown in the picture. He may be seen with the mechanic seated in the plane. His name was George Simpson, of the Dayton-Wright Company.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



THE front-cover design this month departs from the usual character and is, in a way, an innovation which is based upon the theme of the principal picture—"The Spirit of '76." The idea was suggested by the photographer, M. D. Hanson, of Portland, Maine, on Patriot's Day, April 19, several years ago. Having been impressed by a reproduction of this well-known historic group, "The Spirit of '76," conceived and painted by A. M. Willard, in the year 1876, the centenary of the period when New England rose to arms and when, on April 19, the first struggle for freedom occurred at Lexington and Concord. Having an appropriate model, Mr. Hanson—from memory and with a good mental impression of Willard's picture—arranged the old man as the principal figure in the group. There is a slight variation in the pose of the arms; otherwise it is a good imitation. In order to enhance, if possible, Mr. Hanson's effort, the Editor procured a copy of Willard's famous picture, and had the photo-engraver produce a small vignette of the right-hand figure; so that we have, in a way, a minimum representation of a file-and-drum corps. The idea of adding the small figure of the aged fifer was borrowed from French art-publishers, who used to place, near to the bottom of the margin of an engraving or a photogravure, a small reproduction of some important detail in the picture or, frequently, a portrait of the artist. This miniature sketch, called a "remarque," took the place of the signature of the artist, which was attached to the first impressions, which, on account of their superior sharpness, were much sought after by connoisseurs and collectors and brought a higher price than the subsequent and numerous impressions. After a certain number of choice impressions had been printed, the remarque, or the artist's signature, was removed from the plate. In the case of the April issue of PHOTO-ERA MAGAZINE, however, no such condition exists. If the edition ran into six figures, and the halftone-plate showed any signs of wear, then, perhaps, discriminating admirers of our front-cover designs would insist on getting copies printed very early during the run. Mr. Hanson, the photographer, deserves credit for his patriotic motives, and his artistic and technical effort. Data: Portrait camera 5 x 7, 14-inch Voigtlander Euryscope lens, plate; pyro. Haloid paper; enlarged with Wollensak Verito lens.

The illustrations in Mr. Sanderson's article, pages 166 to 177, are fairly representative of the artistic skill of the members of the Boston Young Men's Christian Union Camera Club, Boston, U. S. A. Mr. Turner's impression of an interior view of Milan Cathedral (frontispiece) will compare favorably with the work of Frederick H. Evans and other eminent English cathedral-photographers. The diagonal perspective with the interest culminating in the large window at the extreme left, and enhanced by the generous foreground, exemplifies the camerist's artistic sense of proportion. Data: April, 11 A.M.; fair; Richard Verascope 45 x 107 mm.; matched 2½-inch Carl Zeiss Tessar lenses; stop, F/8; 25 seconds; Eastman Rapid Orthicon, pyro; Defender Velours.

"As others and myself see Mr. Turner when conversing with him," was Mr. Almy's remark, when he

offered his portrait of the tourist-camerist and present executive of the B. Y. M. C. U. Camera Club. To this opinion, the Editor promptly subscribes. Data: 5 x 7 studio-camera; 18-inch R.R. portrait-lens; stop, F/8; Jan., 11 A.M.; daylight and electric light; 2 seconds; Polychrome plate; pyro; Defender Velours print.

Mr. Seelig is regarded by members of the club as a prince in pictorial composition. He fully deserves this tribute, although, in his rhapsody of long shadows, page 169, he does not seem at his best. The long parallel lines on the snow-covered meadow, and their sources opposite, would form a pleasing picture were it not for the brook which intrudes itself rather abruptly and unpleasantly. This particular meadow-brook may present a more attractive appearance in summer than in winter, as pictured by our artist. It suggests a gaping wound; but Mr. Seelig has undoubtedly made the most of this difficult subject. Data: Melrose, Mass.; February, 4 P.M.; 3¼ x 4¼ Reflex; 7½-inch Struss Pictorial lens; stop, F/4.3; 3-tone color-screen; no exposure given in data; Standard Ortho; Rytol in tank; Artura Carbon Black.

It is pleasing to observe the progress which club-members are making towards simplicity in pictorial composition—the absence of detracting objects. Nothing, in this respect, could be better than Mr. Hanson's "Aurora," page 170. The figure is placed with proper regard for artistic spacing. Technically, also, the picture merits high commendation. Data: 3¼ x 4¼ Graflex; 6½ Smith soft-focus lens; at F/7; 3-tone color-screen; August, 10 A.M.; diffused light; 1/25 second; Orthonon plate; pyro; Artura Carbon Black.

With the exception of the prominent white line of the lace-collar—which could have been corrected with no difficulty—Mr. Vincent's portrait, page 171, is exceedingly well done. The illumination has been managed with rare skill, and the white lace-collar (excluding the feature already mentioned) takes its subordinate place. The values, throughout, are very good. The profile with its regular features is very attractive, although the parted lips detract somewhat from an artistically perfect result. Data: February, 12 noon; artificial light; 5 x 7 Korona view-camera; 12-inch Wollensak Velostigmat; stop, F/4.5; 10 seconds; Cramer Inst. Iso; pyro-soda; Artura Carbon Black; mirror-reflector to light shadow-side.

Nobody expects anything less fine and masterful from Mr. Hammond than his group of birches, page 172. Graceful lines dominate this peaceful woodland-scene, and the slender tree-trunks are relieved with the right degree of prominence against the gentle background. The composition is perfect. Data: June, 10 A.M.; good light; 4 x 5 Reflex; 11-inch P. and S. Semi-Achromat; stop, F/6; 1/25 second; Cramer Iso; M. Q.; bromide enlargement.

PHOTO-ERA MAGAZINE welcomes Mr. Astrella into the realm of masterly composition. He has been as profound a student in pictorial photography as any member of the Club, and, probably, none has worked so hard as he in the field of indoor-genre. In the enthusiasm of his earlier efforts, he sometimes overlooked the artistic consideration of his accessories and allowed them to master him. He now not only masters

them and assigns them their proper place in the composition, but he has learned how to dispense with them. His aim now is simplicity, by which unity and harmony are more easily made possible. His "First-Born," page 173, is the culmination of his studious and faithful efforts—behold, a masterpiece! Here we have concentrated interest, no annoying details, nothing to divert the attention from the madonna and bambino, who are held together inalienably in the bond of mother-love. You may talk of your early Italian painters of madonnas—Bellini, Botticelli, Luini. But without resorting to comparisons, it is safe to declare Mr. Astrella's present achievement, even without color, as human, tender and sympathetic as many that have been painted and acquired a reputation often beyond their merits. Data: New London, N. H.; August, 1.30 p.m.; bright; $2\frac{1}{4} \times 2\frac{1}{4}$ Icarette; 3-inch lens; stop, F/4.7; one second; Eastman film; pyro; Wellington Bromide.

As a record of a thrilling event, and made during stress and excitement, Mr. Blackinton's fire-scene, page 174, is excellent. It exemplifies what is expected of a staff-photographer of a first-class daily newspaper, like the *Boston Herald*, and what one of the skill of Mr. Blackinton can accomplish. Data: January, 11 A.M.; good light; 4 x 5 Graflex; $7\frac{1}{2}$ -inch B. & L. Tessar; at F/5.6; 2-time color-screen; $1\frac{1}{2}$ slit, tension 4; 4 x 5 Standard Orthicon; Metol-Hydro (Dochman formula); Azo Hard; exposure made during below-zero weather.

Mr. Ralph Osborne has given a good account of himself in his self-portrait, page 175. We have here a portrait of solid, plastic construction, forceful and dignified in expression and a correct likeness, as well. Data: Stand-camera; 8-inch Smith (soft-focus); at F/6; evening—200 watt nitrogen-filled bulb in Parallax reflector; 6 seconds; Hammer double-coated plate; pyro, in tank; 8 x 10 print on Cyko Enlarging; a white diffusing-screen was used between the light and the subject.

Mr. Eichheim, who, like Mr. Turner, has photographed in many parts of the old world, excels in architectural subjects and likes to invest them with the atmospheric touch of a soft-focus lens. The group of adobe houses, at Taos, New Mexico, page 176, is a good illustration of his manner of interpretation. Data: September; $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex; $8\frac{1}{2}$ -inch Zeiss-Tessar; wide open; film-pack, enlarged print.

In the pair of sea-gulls coursing through the air, page 177, Mr. Jaycock lives up to his enviable reputation as an expert bird-photographer. These two precursors of the airplane are placed with superb artistic effect against a cloud-invested sky, producing a stately picture. Data: Golden Gate Harbor; April, 2 p.m.; bright sun; 4 x 5 Speed Graphic; 7-inch Ic Tessar; stop, F/8; 1/300 second; Imperial S.S.; Rytol; Cyko Enlarging; made from three negatives.

Irving S. Lovegrove obtained Honorable Mention in the December, 1920, competition for his attractive indoor-genre, page 179. A satisfying feature, here, is the concentration of interest—the element of unity. There is no disturbing note in this typical home-scene. If, for instance, the hassock in the lower left corner were a bright object—instead of the subdued one we have here—it would form a strong and misplaced accent. Mr. Lovegrove's picture is, indeed, an object-lesson to students in photography of interiors with figures. Data: 8 p.m.; Mazda C-2 lamp; 5 x 7 Graphic; 9-inch Wollensak Verito; stop, F/5.6 to F/8; 20 seconds; Portrait-Film; pyro; Professional Buff Cyko; hypo alum; light in lamp, no reflectors.

William S. Davis again rises to the occasion in his reply to our request for an illustrated article on balance

by shadows¹ in pictorial photography—pages 186 to 192. His remarks on the subject illustrated, as they are, in a convincing and delightful manner, are instructive in a high degree, and should be read carefully by every student in landscape-photography.

The part of pictorial composition, treated so illuminatingly by Mr. Davis, is either ignored or not understood by the ill-trained American landscape-painter; and appreciative readers of this highly important article should bring it to the attention of their artist-acquaintances. The pictures are on pages 187 to 192. Data:

"WOODLAND SHADOWS"—June, 10.40 A.M. standard time; clear sunshine; 1/10 second; R.R. lens on $2\frac{1}{4} \times 3\frac{1}{4}$ pocket-camera, with stop F/8; Ansco Speedex Film.

"THE SUBSTANCE AND THE SHADOW"—Winter-morning at 11.30 o'clock; 2 seconds; stop, F/32; Ideal Ray-filter; pocket-camera on tripod; Ansco Speedex Film; print enlarged from section $2 \times 2\frac{1}{4}$.

"COOL SHADOWS LIE ACROSS THE PATH"—Late summer, 10.45 A.M. standard time; clear sunshine; 1/5 second; Ilex anastigmat lens; stop, F/8; Ingento series "A" ray-filter; Cramer Portrait Isonon plate.

"SUNLIT SNOW"—January, 1 p.m.; clear sunshine; 1 second; stop, F/16; Ingento "A" ray-filter; Cramer Inst. Iso. plate.

"STONINGTON LIBRARY, CONN."—August, 11.50 A.M. standard time; soft sunshine; 1/2 second; stop, F/16; Ingento "A" ray-filter; Cramer Inst. Iso.

"UNDER THE PORTICO"—August, 12.10 P.M. standard time; diffused light, but strong; 1 second; a supplementary lens was used to increase the angle of view of the regular lens, and this made the aperture employed about F/12 in value; Cramer Inst. Iso. plate.

Advanced Workers' Competition

As a thematic novelty and technically successful effort, "Over the Top," page 197, is exceedingly interesting. The print appears to have been trimmed after careful consideration, so as to give exclusive interest to the toboggan and its occupant. The young sportsman appreciates evidently the daring leap he is about to make, as seen by his tense expression. He is placed just in the right spot within the limited area, and the impetus of the speeding toboggan is admirably suggested. Data: December, 3 p.m.; sunny; 4 x 5 Graflex; 12-inch Cooke; stop F/8; 1/250 second; Portrait-Film cut to fit holder; pyro-soda; P. M. C. No. 4.

The old sand-pit in winter is apparently well patronized by the boys, who enable Mr. Murray to obtain a number of excellent views in this locality. The picture presented on page 198 is one of this series, though not, perhaps, the best. Here, the lone coaster is placed a little too near the center to produce the best possible effect, although the general character of the scene is interesting and well presented. Data: February, 3 p.m.; vest-pocket Kodak; regular lens-equipment; full opening; 1/50 second; Eastman Speed N. C. film; developed with Amidol in tray; enlarged on P. M. C. Bromide No. 3.

With his customary enterprise, Kenneth D. Smith has taken advantage of the numerous sporting opportunities afforded by the state where he lives during the winter-season. His pictures of skiers performing acts of skill and daring have appeared frequently in photo-magazines and newspapers, particularly in the pages of PHOTO-ERA MAGAZINE, during the past few years. In the view on page 199, the skiers are plodding prosaically over the snow. Unfortunately, the camerist

(Continued on page 212)



ON THE GROUNDGLASS

WILFRED A. FRENCH



What's in a Name?

THE Editor owes his baptismal name to one of the chief characters in "Ivanhoe," and, naturally, is proud of it. As it is not so common as William, many people not only misspell it but distort it so that it is scarcely recognisable. Thus, the victim's name, Wilfred, appears on letters addressed to him as Winfred, Wilford, Milford, Medford. He submits patiently to these proofs of carelessness, but objects seriously to the feminine appellation of "Winifred." All these sink into insignificance, however, before the humiliating and unpardonable form of address, "Mildred A. French; dear Madam!"

Condensed Vapor on the Camera-Lens

ONE of our foreign exchanges seems a trifle mixed as to the actual cause of moisture condensing on the lens of a camera. One of the editors of the journal in question declared, that when the camerist stepped from a heated house into the chilly open, with the camera exposed, the surface of the lens would be quickly covered with condensed moisture. After reading this statement, a correspondent wrote to the editor of the journal, maintaining that the opposite was true—that on being taken from the wintry-cold outdoors into a warm room, the lens of the camera would be covered with condensed vapor. The editor, in a footnote, assented to this opinion.

Carrying a camera, or none, an individual wearing eye-glasses or spectacles, on entering or leaving an apartment during exceedingly cold weather, will not be left in doubt how a camera-lens will be affected. The Editor, on entering a restaurant during a recent cold snap, bumped right into a portly person, because the lenses of his eye-glasses were "steamed." Seeing—if you can—is believing.

The Wily Demonstrator

THE Editor is very much like others of his kind—he dislikes to be disturbed, when busy with his pen, by solicitors. But this one, of recent activity, was considerably brief and polite. He was selling a short stick of dry adhesive which, when moistened, and rubbed over the surface to be attached, or to receive its close friend, was supposed to do its work speedily and effectively. The Editor was easily convinced of the efficacy of the article—as demonstrated—and consented to buy it. The salesman took one, neatly done up, from his bag; but the scribe declined to accept it, preferring to purchase the one used in the demonstration. To this, the manipulator objected, saying: "Excuse me; I can't sell this one; I demonstrate with it, you know." He declared eloquently that the others were exact "replicas;" but even this familiar, alluring term fell upon deaf ears. "It's your sample I want, or none!" was the Editor's stern decision, determined not to be caught; and, as he reached for the telephone, the vender grasped bag and hat and fled.

This recalls a similar incident that happened at the local Food Fair, ten years ago. A man with a pleasant

voice and engaging manner was selling—not demonstrating—a small bottle of liquid by means of which a picture, in monochrome or in colors, in a newspaper or magazine, could be easily transferred to a sheet of paper. Specimen-pictures, conveyed by this "Single Transfer Process," were displayed on a screen, in consequence of which, and the orator's convincing remarks, considerable business was transacted. The Editor purchased a bottle—sales-price fifty cents, actual value one millionth of a cent, i.e. the bottle and the cork; for a subsequent, unsuccessful experiment proved the fluid to be just water!

Now, what is there to prevent a silver-tongued impostor from disposing of a lightning-developer or a rapid toner, or even an easy process of making prints in natural colors? He will do astonishing photographic feats before your very eyes, and then sell you—provided that you are gullible—an outfit for a plausible sum, which purchase you may afterwards discover to be worthless. Fortunately, the photographic business is not afflicted with fakers of this sort; even a resident dealer who handles materials of inferior quality will fare badly. Should a pretentious individual try to engage your sympathetic interest, followed by designs on your purse, ring up your dealer and ask a few questions. When you turn around to resume with the visitor, in all probability you will find that he has departed.

Two Common Errors in Pronunciation

Sir! Mister Editor. You may relate the incident, but please omit my name. Our club held a meeting last week, preparatory to having our annual dinner. The chairman of the entertainment-committee, whether just casually or intentionally, in referring to his prospective duties as chief steward on that occasion, mentioned two well-known words, but, unfortunately, mispronounced them. Our vice-president, a professional elocutionist, who sat next to me, called my attention to the speaker's mistakes. I pass the criticism along to you, as a warning to others who have occasion to address club-meetings: for no one likes to be ridiculed.

The offender, referred to above, with evident satisfaction "pulled off" the following two atrocities—"Marjerine" and "Culinary." I give them as he pronounced them, and as many people do and think they are right. Of course, he meant "Margarine" (pronounced correctly with the "g" hard, as in garter) and "Culinary" (pronounced correctly: "Cue-linary").

Our club-member may have made other errors in pronunciation, that evening; but, knowing beforehand what he had to say, I did not listen very attentively. Persons speaking in public, even informally, should make it a point to get acquainted with the rules of grammar and pronunciation.

Faithfully yours,

X. X. X.

P. S. I have since learned that the "Margarine" member has a fond daughter named Margaret (not Marjorie or Margery). He surely does not call her "Marjaret." If he did, some of her playmates might nickname her "Margerine." And there you are!



ANSWERS TO QUERIES



E. H. D.—It is rather difficult for us to determine the exact cause of your trouble, inasmuch as you have sent us none of your prints for inspection. From what you say we are inclined to believe that the reason for your prints not bleaching was possibly due to insufficient washing after they had been removed from the regular fixing-bath. It is very essential where the redeveloping process is used that the prints be thoroughly washed before they are placed in the bleaching-solution. If desired, a Hypo-Alum toning-bath may also be used; but we believe you will find the results obtained with Royal Re-Developer or a re-developing solution mixed in accordance with the published formula will be found much more satisfactory. If after following these instructions you are still unable to obtain the results desired, we shall be glad to have you send us some of your prints for examination.

H. B.—The advantage claimed for the blue nitrogen-filled lamp in printing is that the light seems to have greater actinic power than the regular Mazda lamp. How much more power the nitrogen lamp has over the other is a debated question, particularly, when such lamps are used in the average small printing-machine. It is usually best to use ground-glass in the printing-machine as it diffuses the light evenly over the picture-space and also dims the filaments of the lamp so that they are not likely to make an impression on the sensitive paper. About a 60-candle-power light is sufficient for the average printing-box; but there are so many different types of lamps used to-day that in our opinion it would be better for you to call at some large photo-dealers and make a careful inspection of the various types of printing-machines now on the market. After asking all manner of questions and inspecting the machines personally, you would be in an excellent position to know what would fill your requirements.

J. H.—With regard to a formula to make fabric fire-proof, we give you the following from E. J. Wall's "Dictionary of Photography": prepare following: water, two ounces; sal-ammoniac, 150 grains; boracic-acid, 60 grains; borax, 30 grains. The article to be fire-proofed is boiled in this for about a quarter of an hour; wrung out and dried. Another formula is: water, two ounces; alum, one dram; ammonium-phosphate, one dram; borax, two drams.

A third formula is: water, two ounces; ammonium or soda sulphate (glauber salt), one-quarter ounce; boracic-acid, 30 grains; borax, 30 grains. The first formula is probably the best.

C. M. B.—Fritting of films is exceedingly unusual as a rule, except in the case of a few brands which are quite thin. Most of our American films are backed with an unsensitized coating, which does much to prevent frilling and curling. The use of a fresh acid-alum fixing-bath ought to prevent frilling in the wash-water. If not, a hardener, such as formalin, may be employed at any stage of the work, even after development and previous to fixing, if that seems necessary. The solution should contain 1 ounce of formalin to 20 ounces of water, in which the film should be immersed 15 minutes. Be sure that the solution is dis-

tinately alkaline, as neutral and alkaline solutions have very little hardening-effect. Of course, you doubtless realize that a chrome-alum fixing-bath has greater hardening-properties than one containing ordinary alum. Probably, also, you know of the various hypo-eliminators by means of which long washing in warm water may be avoided. Of them all, potassium permanganate is probably best.

W. J. W.—Ferricyanide reducer usually causes stains on prints, and is generally thought unsuitable for this reason. If it must be used, it should be very dilute and not allowed to get upon the paper itself, but should be applied with a brush to the film-side of the print. "The British Journal of Photography Almanac, 1917," gives a cyanide reducer for prints on page 438, but points out that the solution is very poisonous. The formula follows:

Iodine (10 per cent sol. in potass. iodide sol.)	30 minims	6 c.c.s.
Potass. cyanide (10 per cent sol. in water)	5 minims	1 c.c.s.
Water	1 ounce	100 c.c.s.

A. C. O.—The lens should always be parallel to the film or plate. A camera-front that is not tight is apt to be responsible for a greater or lesser amount of distortion. Before purchasing a camera be sure to examine carefully that portion of it which holds lens and shutter. If it leans forward or backward and the right and left sides move easily, so that one part of the lens is nearer to the film than the other—do not accept the camera. A rigid front is essential to success.

W. C. K.—Most roll-film and film-packs are warranted against deterioration from eight to twelve months. The expiration-date is stamped plainly on every box, so that with due attention there is little danger that you may receive old film. If the film is to be used immediately it makes little difference, provided the expiration-date has not been passed.

G. W. B.—Reflections in the water are often a decided addition to the artistic composition of a picture. However, a picture which includes a reflection so nearly a duplicate of the original subject that the beholder is hard put to decide which side up to hold the picture, is not an artistic composition. A reflection should be diffused by ripples on the surface of the water or by being shown as a mass. To the uninitiated, a mirrorlike reflection is of greater value than one in which detail is lacking. As a record-picture of a beautiful lake, it may be excellent; but in the eyes of art-critics it has no great artistic value.

R. C. W.—There is much to be said in favor of the anastigmat lens; but it does not follow that the camerist who is unable to buy one cannot obtain good pictures. Many of the most beautiful pictures that have won first prizes in PHOTO-EXA competitions were made with meniscus or rapid rectilinear lenses fitted to moderate-priced cameras. If you have a box-camera, do not think that you cannot compete successfully in our competitions. Do your very best and send in your picture—you may win a prize.

Our Illustrations

(Continued from page 209)

has made the mistake—so common, that the Editor has made it the subject of a special article—of representing the line of ski-ers *less* distinct than the setting. The observer cannot but note the comparatively extreme sharpness of the background. This reversal of the two pictorial planes may be due to careless focusing or to a too low shutter-speed. Yes; the figures are hurrying out of the picture toward the right, but those in the rear are sufficiently conspicuous to hold their places in the view and to remain a legitimate part of the picture. The line of the mountain, descending obliquely, seems to exert a restraining influence on the furthestmost ski-er and to connect him with the long line that runs from the upper left corner to the lower right, and then back across the snow-field, ending with the last figure at the left. Lerolle, the eminent French painter of peasant-life, has a penchant for picturing a shepherdess with her flock of sheep strolling across the picture-space, and doing it successfully. On the other hand, when he places a couple of peasants deliberately at the extreme edge of the picture and *walking out of it*, he commits an offense against pictorial presentation and has been justly criticised for it. And Lerolle is not the only painter who violates the well-established rules of pictorial composition, and is "held up" for it. Data: Early March; $3\frac{1}{4} \times 4\frac{1}{4}$ R. B. Graflex; $7\frac{1}{4}$ -inch Tessar; at F/8; 1/40 second; Graflex Film; pyro, in tank; enl. on Contact Enlarging Studio Cyko.

Beginners' Competition

THE indoor-portrait by K. J. Herzer, page 203, is a conscientious and well-intentioned effort, and as such deserves a word of praise. It is evidently spontaneous and ingenious, but as a standard it ought not to be encouraged. The pose is awkward and strained, and lacks dignity, repose. The illumination is wrong, as seen by the eyes which are in shadow and scarcely distinguishable. The figure is too large for the picture-area and also badly spaced. By studying indoor-portraits, of which a great many excellent ones have appeared in this magazine, during the past years, Mr. Herzer will derive valuable ideas which he can apply without practical difficulty to his future efforts in home-portraiture. Data: December, 1 P.M.; in southeast corner of room having south and east windows; bright sun; $2\frac{1}{4} \times 3\frac{1}{4}$ Niklas; $4\frac{3}{4}$ -inch Goerz Tenastigmat; stop, F/6.8; one second; pyro in tank; enlargement on No. 3 P. M. C.

In "Pick Me a Blossom," page 204, the photographer had an attractive model and a pleasing setting to produce a delightful outdoor-figure in landscape; but he failed to make the most of his opportunities. To be sure, the young girl is good-looking; the tone-values are correct; the modeling in the white costume is admirable and the landscape proper is pleasing. But all this does not make for the artistic success which is absent. Instead of being caught or placed in a natural and graceful attitude, the model stands stiffly, meaninglessly and consciously before the bush that shall yield the coveted blossom. Her position should be more to the right and a little way from the center of the picture. She would look just as well with the white, distracting, inartistic hair-ribbon removed or replaced by one of a dark color. This matter of the objectionable white (or white in the print) hair-ribbon, whether the person is photographed indoors or outdoors, has been the subject of severe criticism in the pages of this magazine during the past twelve

years. Workers have taken the hint, and this conspicuously inartistic feature is now seen very seldom. Naturally, it is easily avoided, and, if existent, can be corrected in the negative. Data: June, 2.30 P.M.; strong light; $2\frac{1}{4} \times 4\frac{1}{4}$ Kodak; 7-inch Bausch & Lomb; stop, F/16; 1/25 second; Eastman Speed Film; Metol-quinol; part of negative enlarged on brilliant Velvet Bromide. Strong wind blowing.

Example of Interpretation

THE street-scene in Munich—photographed by Richard Pertuch before the World War—page 200, illustrates admirably the character of the theme to be interpreted, viz. street-scenes. Data: 11 A.M.; bright; 4×5 Eastman N.C. Film; pyro; Voigtlander Collinear lens; stop, F/8; 1/10 second; enlarged on Eastman Royal Bromide.

Our Contributing Critics

THE subject to be criticised this month, page 206, is totally without human interest. Nevertheless, our assistant-critics can exercise their favorite faculty *ad libitum*. The little tree can stand it, and the adjoining box—composed, probably, of hard pine—is also equal to the prospective ordeal. No data.

Daylight-Effects by Moonlight

WE receive many inquiries about the exposure that is needed to make pictures by moonlight, and are often asked, continues *Kodakery*, whether it is possible to make pictures by moonlight that will resemble those made by sunlight.

One of the things that is sometimes overlooked by those who have never made moonlight-pictures, is the fact that the brilliancy of moonlight not only increases and decreases with the phases of the moon; but that the brilliancy of the light that is reflected by the moon is not proportional to the area of its visibly illuminated surface, the half moon reflecting less than half as much light as the full moon.

In calculating the exposures to give by moonlight we must, therefore, base them on the brilliancy of the full moon which, for photographic purposes, should be considered as 1/600,000 the brilliancy of sunlight. The rule for obtaining daylight-effects by moonlight is, to expose for as many hundred minutes by full moonlight as we would expose for 1/100 parts of a second by bright sunlight.

The exposure recommended for an ordinary landscape showing sky, with a prominent object in the foreground, is 1/25 of a second with stop 16, when the sun is shining brightly. This is the equivalent of 1/100 of a second with stop 4 on rectilinear, or stop F/8 on anastigmat lenses. To obtain a daylight-effect by moonlight we would have to give an exposure that is 600,000 times as long as 1/100 of a second (100 minutes), with stop No. 4 or F/8. With a single-lens camera the exposure would have to be 200 minutes, with the largest stop.

We have seen many moonlight-pictures of subjects in which there were no shadows of prominent objects visible in the foreground, that could scarcely be distinguished from pictures that were made by daylight.

When shadows of such prominent objects as buildings or large leafless trees appear in the foreground, they will have clearly defined outlines in pictures that are made in a fraction of a second, by sunlight; but shadows cast by the sun or moon do not remain stationary.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication



Fred Payne Clatworthy's Autochromes

BOSTON, U.S.A., was fortunate, indeed, when, on March 18, in Steinert Hall, Fred Payne Clatworthy, the well-known autochrome-specialist and landscape photographer, with a studio at Estes Park, Colorado, gave an illustrated lecture on autochromes. Mr. Clatworthy has made, during the past eight years, a large number of notably beautiful autochromes of scenery in the National Parks of California, Arizona, Colorado, and elsewhere, forming a collection of 5 x 7 autochromes which he values at \$10,000. On the occasion mentioned he projected, on a nine-foot sateen-screen, eighty 5 x 7 autochromes selected from his large collection. They were principally of Southern California, the Desert, and the Grand Canyon of Arizona. These autochromes were remarkable for accuracy of detail and color, particularly the most delicate shades of purples, browns, blues and other predominant colors. The plates of the Grand Canyon were unusual on account of their delicate blue, obtained during the early morning and the late afternoon. Remarkable for extraordinary fidelity and beauty was a series of sunsets with the ruddy orb of the sun just about to disappear and, having gone, coloring in a fiery red the underside of a bank of clouds.

Mr. Clatworthy prefaced his exhibit by projecting the first successful portrait autochrome made, in 1907, by the Lumières, of a prominent merchant of Lyons, France, which, on account of its remarkable accuracy of flesh-tints and the hair and beard of the model, evoked hearty applause. This valuable, historic autochrome was presented by Antoine Lumière, head of A. Lumière & Sons, inventors and makers of the autochrome, to Wilfred A. French, Editor of PHOTO-ERA MAGAZINE, on the occasion of the banquet given by the latter in honor of M. Lumière, in Boston, November 1, 1907. Although the plate has been shown to friends many times, by Mr. French, its colors retain their original brilliancy, purity and fidelity. Then followed projections of 5 x 7 plates of flower-gardens, ocean-vues, mountain-scenery, old Spanish missions, cacti and wood-interiors, in great variety and of surpassing beauty—each evoking hearty expressions of approval.

Mr. Clatworthy has been giving a series of illustrated lectures on autochromes in the East—the Brooklyn Institute of Arts and Sciences; the Columbian University, in the Camp-Fire Club and other clubs, New York City; and the University and Museum of Fine Arts, Philadelphia. He considers the autochrome plate as the ideal process of rendering simply and faithfully the colors of nature, oil-paintings, water-colors and all objects in colors.

From the Editors of Photo-Era Magazine

WE take this opportunity to thank our advertisers, subscribers and readers for their patience and uniform courtesy during the past few weeks. The moving of our publication-office to Wolfefboro, New Hampshire, caused unavoidable delays in the mechanical and editorial preparation of the February and March numbers. Although this and subsequent issues will be a little later than usual, it will not be long before

we shall be back to our regular publication-date. In the meantime, we ask our friends to join us in making the best of a situation that was unavoidable in the circumstances.

Photo-Era Magazine

MEMBER OF



WE are pleased to announce that we have been chosen a member of the Association of Army and Navy Stores. We were appointed to membership after a thorough examination by their committee. It is a recognition of the high editorial and typographical quality of PHOTO-ERA MAGAZINE. We extend to the 50,000 officers and men of the United Services an invitation to avail themselves of the photographic information that may be obtained from the magazine, from its Editors and from the selected books which we sell. Members of the association are entitled to and will receive every courtesy from PHOTO-ERA MAGAZINE.

Kansas City Pictorial Exhibition

INDEED, it is gratifying to note the ever-increasing practical interest in photography. Exhibitions could not be held if manufacturers, photo-supply dealers, camera clubs and the amateur and professional photographers throughout the country were not actively interested. The proof is shown in the number of exhibitions—one of which has been conducted with exceptional success by the Kansas City Photo-Supply Company, 1010 Grand Avenue, Kansas City, Missouri. From February 26 to March 12, the exhibition was held at the galleries of this enterprising photo-supply house; after March 12 the entire collection of pictures was transferred to the Kansas City Art Institute for the further pleasure and benefit of the public. According to reliable information, not in years has such enthusiastic interest in photography been aroused.

In looking over the list of exhibitors and their pictures, one cannot fail to be impressed by the magnificent representation of the foremost pictorialists of this country. Dr. Rupert Lovejoy, Portland, Maine, won the first prize with his picture, "Between the Lines"; W. A. Alcock, New York City, second prize, with "A Lonely Vigil"; and George W. French, Newark, New Jersey, third prize with "Bending to the Task." The latter is well-known to readers of PHOTO-ERA MAGAZINE. Other names to be noted among the exhibitors are the following: Margrethe Mather,

Louis F. Bucher, Dr. A. H. Cordier, William S. Davis, Louis Fleckenstein, J. H. Field, Paul Wierum, C. J. Marvin, W. C. Sawyer, Emme C. Gerhard, Millie Hoops, H. A. Hussey, Sophie L. Laufer, Louis R. Murray, W. H. Porterfield, William T. Starr, Edward Weston and many more equally familiar. Out of 748 prints submitted 195 were selected. The Kansas City Photo-Supply Company is to be congratulated—its first annual exhibition was an unqualified success.

Eastman's Traveling-School

THE Eastman School of Professional Photography for the year 1921 favored Boston with a three-day session, held, during the last week of February, at Tremont Temple. The importance of these lectures and demonstrations, emphasised by an exhibition of photography in all its branches, was recognised by the craft throughout New England; and, despite the present high railway-fares, representatives of every portion of New England, and many from Canada, were in attendance. Every topic of vital interest to the professional photographer, and the photo-finisher, was included in the comprehensive program. Every visitor was loud in praise of the valuable information and suggestions he had received from attending this school, which is one of the best things the Eastman Kodak Company is doing for the craft, in general.

Exhibition by E. O. Hoppé

THE first exhibition of photographic prints by E. O. Hoppé, held in this country, took place from March 7 to 31, at the Belmanson Galleries of John Wanamaker, New York. The exhibition consisted of one hundred and seventeen portraits of distinguished personages and twenty-nine miscellaneous subjects, including outdoor-genres and scenes in London. The show attracted considerable attention and was well attended.

Interesting Articles by Frederick C. Davis

READERS of PHOTO-ERA MAGAZINE are well acquainted with Frederick C. Davis who has contributed many interesting and practical articles on photography. In a recent letter he calls attention to some of his work of a photographic character which is to appear in other magazines and which should be interesting to our readers.

During the next few months *Forest and Stream Magazine* will publish an article, "About Those Photographs of the Trip" and *Experimental Science Magazine* is to publish, "Static Electricity in a Photograph Studio." We hope that our readers will bear this in mind to their own advantage.

Cohn & Krug to Hold Exhibition

DURING April, Cohn & Krug, 112 South Elliott Place, Brooklyn, New York, will hold an exhibition of photographs at their studio. Such well-known workers as W. E. Macnaughtan, Clarence H. White, F. O. Libby, John Paul Edwards, Dr. Ruzicka, Dr. Genthe and others have promised to contribute prints. Invitations will be sent out and all the photographic fraternity is cordially invited. There will be no admission-fee and Messrs. Cohn and Krug are eager to greet large numbers of amateur and professional photographers. A hearty welcome awaits every visitor.

Permit for Indoor-Flashlights

ON account of possible damage caused by professional photographers when making flashlight-pictures, the Fire-Commissioner of the city of Boston now requires a special permit, costing fifty cents. Although a permit is not necessary in the case of amateur-photographers when making flashlights in their homes, certain landlords are averse to giving permission to their photographer-tenants, who are advised to look into the matter; otherwise a clandestine flashlight might become the means of breaking the lease of the apartment. Whether, in case of a fire caused by a flashlight, the amateur-photographer can collect from his insurance company, is another interesting question to determine.

Photo-Exhibition by American Photography

An interesting prize-competition was held at the headquarters of *American Photography*, at 428 Newbury Street, Boston, during the month of March. Over four hundred competitors entered the contest and about sixteen hundred prints were submitted by amateur-photographers from various parts of the United States and from foreign countries. The exhibition was widely advertised and attracted a large number of visitors. The first prize went to John Paul Edwards, Sacramento, Cal.; second prize to H. Ravell, Laguna Beach, Cal.; third prize to Bertha S. Austin, Catonsville, Md.; fourth prize to Dr. D. J. Ruzicka, New York City. The fifth to fifteenth prizes were awarded to the following: A. D. Brittingham, Forman Hanna, G. S. H. Harding, Arthur F. Kales, Francis O. Libby, Dr. Rupert S. Lovejoy, W. H. Porterfield, Thomas O. Sheckell and H. Y. Simmons. Honorable mentions were awarded to one hundred and eight competitors. All prizes were in the form of cash, whereas each winner of honorable mention received \$2.50 value in books or subscriptions.

Your March Copy

THE Publisher regrets sincerely that a number of copies of the March issue containing four accidentally duplicated pages were sent out. Any one having bought or received an imperfect copy of this description may have it exchanged, free of charge, for a perfect one, by notifying the Publisher.

Of Kodak Fame

A FACETIOUS correspondent, who is an admirer of the well-known physicist, Dr. C. E. K. Mees, Director of the Chemical Research Laboratory of the Eastman Kodak Company, writes to ask whether Dr. Mees was born in the shadow of the Eastman Kodak Company, because he assumes that his middle initials stand for Eastman Kodak.

Although this is a pleasantry at which Dr. Mees will not take umbrage—I am sure—I have the pleasure to inform our correspondent that the full name of the famous physicist is Dr. Charles Edward Kenneth Mees.

W. A. F.

The Larcenous Word to Go

PRISONER—"Your honor, I inherit this larcenous habit. My father was a grafter and my mother was a photographer. I can't help taking things."

JUDGE—"Then take seven years at hard labor."

Exchange.



LONDON LETTER

CARINE AND WILL CADBY



THE Swiss Winter-Sports Season is drawing to a close. It is the second since the war, and in some places the number of visitors has equalled pre-war times. But there are others which have not so far recovered their old popularity, as many English people who used to come in winter, cannot afford present prices. Not that the charges made are excessive; but the cost of raw materials must be considered. In one place at which we have been staying—at five thousand feet above sea level—the manager told us that we were warmed, and our food cooked, by heat obtained from *American* coal that had been imported when prices were at their highest. It seemed to our frugal minds that such coal would be almost too precious to burn. Far more practical appears the method at the Kleine Scheidegg (2063 metres) where we are writing these notes. Here we are conveyed by train, warmed, and cooked for, by electricity generated in the valley below, the power being obtained from the Lütchne River.

In spite of the high prices of photographic materials, we have noticed that cameras are more in evidence than in pre-war years. It is not a case of a camera to every visitor—the average is much higher than that—for many people have brought several. Repeatedly we have met visitors who have two—a reflex and a folding-pocket variety. A pattern that is much in vogue amongst Swiss tourists is an excellent Ernemann folding postcard-size camera fitted with a focal-plane shutter and a good lens. This design is for plates, and has an ingenious device by which the focusing-screen is shifted backwards, but not detached, when a plate is inserted. Few tripods are in evidence, and for serious pictorial composition we think that this is a mistake. One enthusiastic ski-ing photographer had adapted his ski-ing sticks to the uses of a tripod, ingeniously making the handles to screw off and take a firm fixing, on which the camera is secured. The weak point of the arrangement is that a third stick has to be employed to form the tripod, so the skier must either carry three, or borrow a companion's stick, in which case he cannot be alone, which, in our opinion is the only satisfactory arrangement when wrestling with what is, in any circumstances, difficult work. The tripod is particularly useful when using any form of telephoto lens and, with the usual disks on the ends of the sticks, the tripod stands well on the snow without the points going deep into it. But it has to be borne in mind that most photography at these altitudes has to be done quickly—generally in an unpleasantly low temperature. And often it is necessary to carry the apparatus in a rucksack when the camera man is on a ski-ing expedition, and must shoulder a good deal besides his photographic kit.

We have found at times the delicate mechanism of a between-lens shutter is inclined to be affected by extreme cold. The focal-plane arrangement does not suffer in the same way; but its bulk is a serious drawback. One of the most photographed subjects here is a ski-jumping competition, and just now all the big events are being contested. For such purposes, a very rapid exposure is necessary, and only a focal-plane shutter can be relied on to give satisfactory results. The light—both direct and reflected—is so

bright, and the general surroundings are so white, that surprisingly full exposures can be secured at the so-called 1/1000 of a second exposure. We have photographed a ski-jumper in mid-air with the very shortest exposure it was possible to give with a Goerz focal-plane shutter, and obtained perfect and sharp detail in his dark clothes, although he was traveling *across* the plate at a very rapid pace.

A good many of our photographic friends have been taking short holidays this winter, and so have avoided the damp and unusually mild spell of weather in England. One or two have sought sunshine on the Riviera, and found an August temperature. Others, like ourselves, need the more bracing change of Switzerland. We have just met a young member of the firm of Butcher (partners in Messrs. Houghton's, the big English photographic dealers and manufacturers). An elder member of the same firm is now in Davos. Mr. Ward Muir is also in Davos-Dorf, and we have been in telephonic communication with him. His health has made this change necessary, and he has to be content at present to let skating and ski-ing alone. In the meantime, he is doing a series of photographs from his balcony, and, as there is much going on in this biggest of Swiss winter-stations, his pictures promise to possess plenty of human interest. His last effort was of a knickerbockered lady of doubtful nationality, out for her first turn on skis. Her in-experience had the advantage for him that she did not readily get out of his range, and he was able to obtain a variety of attitudes more or less on the same spot. But, as Mr. Muir says, his chief energies are being devoted to his new novel which is due to be published this autumn.

The drawback of figure-photography, out here, is that in paying one's obligations to models one goes home with a burdensome lot of odd work to do. If any one is tempted to photograph such events as ice gymkhana, ski-race meetings, etc., he is overwhelmed with requests for prints. The ordinary visitor is absolutely ruthless to the photographer when it is a case of seeing himself, or herself, even as an almost indistinguishable speck on a print. We are old hands now, and understand the gentle art of wriggling out of any promise that would mean sending ten or fifteen prints to different addresses, especially at the present rate of postage. Our method is to send the actors postcards, letting them know in which papers a representation of their performances will appear. On the other hand, those people who have sacrificed time, and often sport, to help us, have every right to expect prints, and we let them have them as soon as we can.

As our book, "*Switzerland in Winter*," is being revised, the first edition having been sold out, it has become necessary for us to get fresh illustrations for it. The out-of-dateness of some of the photographs lies in the lack of feminine garments. Women seldom now wear skirts for ski-ing, and for all other sports only the shortest are seen. Consequently, we have to scrap all those illustrations in which sportswomen figure.

Mr. F. Martin Duncan, the well-known animal-photographer, is also librarian to the Zoological Society.

(Continued on next page)



BOOK-REVIEWS

Books reviewed in this magazine, or any others our readers may desire, will be furnished by us at the lowest market-prices. Send for our list of approved books.

A WONDERLAND OF THE EAST. The Lake-and-Mountain Region of New England and Eastern New York. By William Copeman Kitchin, Ph.D. One of the "See America First" series. 287 pages text. Three maps and fifty-four plates of which six are in color. Special "Afterward" for the motor-tourist, bibliography and index. Price, decorative cloth-cover (boxed), \$6.00. Postage according to zone. Boston: The Page Company.

The indescribable charm of the mountain-and-lake region of New England is known to those who have "blazed their own trails"; but there are thousands who have never seen or known the beautiful lakes and rivers, the valleys and mountains or the places made famous by historic men and events. In a book that is worded in excellent English and beautifully illustrated, Mr. Kitchin leads his reader deep into the "Wonderland of the East." To quote the author, "this is a book of travelogues of sundry motor-car journeys, during four successive seasons, through the woods and valleys, alongside the rivers and the lakes, and among the hills and the mountains of Eastern New York, Vermont, New Hampshire, Maine, Massachusetts and Connecticut; with a wide tour through the Finger Lake district of Central New York." As a narrative, it holds the interest from cover to cover; as a guide-book for the motorist it is invaluable; but as an open sesame to a pictorial paradise for the camerist, it is unsurpassed. There are many books that tell of the lakes, mountains and valleys of New England; but none contain so accurate a description of the entire eastern part of the United States. The illustrations prove the truth of Mr. Kitchin's beautiful word-pictures and are excellent examples of photography and of duogravure printing. Six are reproduced in natural colors by the Phototone process. In short, there are quiet humor, brisk narrative, accurate historical information, practical motor-experience and pictorial photography combined in this delightful volume.



Of Interest to Our Readers

THOSE of our readers who may not know of the beautiful mountain-and-lake region in which Wolfeboro, N.H.—the new home of PHOTO-ERA MAGAZINE—is situated will find in "A Wonderland of the East" by William Copeman Kitchin, Ph.D., a description of the Lake Winnepesaukee and White Mountain regions that will surely attract hundreds of amateur and professional photographers throughout the year.

By special arrangement copies of "A Wonderland of the East" may be obtained direct from PHOTO-ERA MAGAZINE, Wolfeboro, New Hampshire, U.S.A. Price, cloth, decorated cover (boxed), \$6.00. Postage according to zone.

London Letter

(Continued from preceding page)

He has been making some interesting experiments with lobsters, hypnotising them so that they remain in any position in which they are placed. He gave lately a little demonstration on his office-desk in Regent's Park, which was witnessed by Dr. Chalmers Mitchell, F.R.S., secretary to the Zoological Society. An ordinary large lobster was selected for the experiment from a neighbouring fishmonger's shop. It was at first very restive and angry, but after Mr. Duncan had made a few rhythmic passes down its polished back, it grew tame and allowed its tail to be unfolded. Then for about two minutes, Mr. Duncan massaged its back, until the expression of annoyed anxiety gave way to a regular trance. The operator then lifted the hypnotised creature and stood it on its head, with the two claws and nose as points of support. It remained in this position for five minutes, when signs of its ordinary life began to appear. Some very interesting photographs of the whole performance were made. No explanation can be given; but Mr. Martin points out that important nerve-centres lie just under the shell of the back, and, possibly, these have something to do with the phenomenon.

MURREN, Feb. 6, 1921.

Our Looted Parcel-Post

SECOND-HAND book-stores in some of the larger cities of this country are reported to have done a prosperous business during the years of the last administration, which seems to have permitted robbers and thieves to loot the mails with impunity. The parcel-post has sustained tremendous losses of articles of every description, being appropriated and either kept or sold, the thieves being either employees of the government or outsiders. Books seem to have been a favorite form of loot, and it finally became necessary for the sender to insure every package to ensure its safe delivery. Even this precaution proved futile, and insurance-companies, last year, paid out about six hundred thousand dollars to cover losses by theft, sustained by the parcel-post. Books on photography were also among the articles stolen, the thieves disposing of them to second-hand book-stores, which, buying them at a low price, were able to sell them at a handsome profit.

Dealers in photographic supplies, in general, including the three leading Boston dealers,—Robey-French Co., Ralph Harris & Co., and Pinkham & Smith Co.,—suffered considerable losses in this manner, and were obliged to insure every mail-package of value, whether cameras, lenses or books. General supplies, like paper and films, were usually not molested by the thieves. Why so few of the criminals were apprehended and punished, is a mystery. Very little if any effort seems to have been made to stop these wholesale robberies of the mails, en route or at the various postal stations. Thank heaven! a change of administration in every department of the government has been made, and it should become possible to conduct our mail-service in at least as efficient a manner as before the advent of the recent demoralising administration, when even Mexico and the unsettled countries of Europe excelled us in the transmission of letters and packages.

It is fervently hoped that the Harding Administration will correct these and innumerable other deplorable conditions. Among other things it may be possible to abolish the necessity to insure parcel-

post packages in order to effect safe delivery. Such a process entails time, trouble and expense, and should be regarded as nothing less than an inducement for the department-employees to be honest. Does this become the dignity of a well-managed Governmental department?

The special delivery of letters proved to be another Burlesque on account of the fact that in many cases the S. D. stamp affixed to a letter only delayed it. This feature has often been called the "Special Delay" stamp, largely because it frequently took time to find the person willing to take the trouble, for the sum of ten cents, to deliver the package to the destinaire; whereas, in many cases it could have been delivered more promptly had it been treated as an ordinary letter. With the unlamented Burleson at the end of his demoralising activity, this feature of the mail-service should also experience improvement, and the boy on the bicycle may again deliver Special Delivery letters or packages, instead of any random individual temporarily out of employment.

Another feature of the Burleson administration was the atrocious appearance of our postage-stamps. This has not been matched by the poorest country on the face of the earth. Stamp-collectors, in their albums, show our regular purple three-cent stamp in *fifteen different shades*, and in about a dozen different ways of printing and quality paper—a severe arraignment of that branch of the American postal service, as conducted during the past four years. During the period of the War, and up to the present time, members of the PHOTO-ERA Editorial Staff have experienced great difficulty to find postage-stamps of sufficiently decent appearance to use on letters going to foreign countries. Their patriotism and self-respect forbade them to use the poorly printed ones—particularly of the three-cent denomination—when they were receiving from all parts of the world letters bearing postage-stamps infinitely superior, in every way, to those issued by the United States during the recent Burlesque régime. With a great sigh of relief, therefore, every thinking correspondent in this country welcomes the present Administration, which, confronted as it is, with innumerable and well-nigh insurmountable difficulties, will make marked improvements in every branch of the postal-service, including the quality of our postage-stamps, so that, in these respects, we may soon be on a par with foreign nations—yes, even with the new, small republics of Esthonia and Letivia.

W. A. F.

Notice to Beginners

THE pages of PHOTO-ERA MAGAZINE contain helpful articles on pictorial photography and on technique—written not only by the Editor in his department, "Our Illustrations," but by others throughout each issue of the magazine. There are also very instructive articles from the pens of such experts as W. S. Davis, Frederick C. Davis, Winn W. Davidson and others. Most of our advanced workers show by the improvement of their work—as exhibited in these pages—that they read our words and advice conscientiously and profitably. Unfortunately, there are some who neglect to read PHOTO-ERA MAGAZINE carefully and, by the constantly recurring faults in their pictures, indicate that they do not profit by the advice that PHOTO-ERA MAGAZINE offers, from month to month. From now on, no pictures will be considered eligible in these competitions, that show continued ignorance of the rules of composition referred to in these pages, particularly in the department, "Our Illustrations."

That department is written for the special benefit of those whose work is faulty or capable of improvement. There are certain contributors in the Beginners' Department whose entries, from month to month, show no visible improvement in matters that are being constantly pointed out by the Editors, such as children dressed in glaring white and photographed in the brilliant sun—producing an effect at once harsh, disagreeable and inartistic, besides being bad technically; an outdoor-group with each member looking directly into the camera, and with mouths open as well; outdoor-genres with background playing a bewildering jazz-tune; single outdoor-figures posed against a distracting background of fence-rails or trellis, etc.; a view of water and shore in contrasting tones without detail or gradations.

For these reasons, the entries in the February competition, although numerous, were not considered favorably by the Jury, and, consequently, no first prize was awarded. The participants in the Beginners' Competition will receive little profit or encouragement if prizes are awarded according to merit, when the merit happens to be of a low standard. Hereafter, the verdict will not be, "Which of these two pictures is the less objectionable," but "Which of these two has the more merit;" for a picture that has very little merit—although by comparison the best of the entire lot of entries in this competition—will be ignored, even if it means that no prizes at all shall be awarded. This competition is conducted with a view to benefit its participants whose efforts are not on so high a plane as that of the advanced workers, but where, nevertheless, real merit is shown. Therefore, participants in the Beginners' Competition should make it their business to read PHOTO-ERA MAGAZINE carefully and seek to apply its words of counsel and advice.

Participants ought to have sufficient intelligence to know whether or not they have been successful in producing pictures of at least a fair degree of merit; otherwise the pictures must not be entered in this competition. If sent, they will only be returned—even without a word of comment—provided, of course, the necessary return-postage has been sent. It must be evident to such workers that to submit prints without real merit means a useless expenditure of time, money and effort.

W. A. F.

Light-Intensity and Exposure-Time

F. E. Ross of the Eastman Research Laboratory, in the *Journal of the Optical Society of America*, discusses critically the equations connecting photographic density with exposure which have been proposed by Abney, Hurter and Driffield, Elder and Channon. In particular, *The British Journal* says, certain theoretical objections to the Hurter and Driffield formula are advanced. The author proposes a new formula, the underlying idea being the separation of the grains of an emulsion into different classes, according to their sensitiveness. The thickness of the emulsion is taken into consideration, and is measured not in microns but by number of layers of grains. The mass-action equation is assumed to hold for each group. All formulae are compared with two types of measured characteristic curves, in one of which the "toe" is prominent, in the other, it is almost absent. It is difficult to include the characteristics of "toe" and "shoulder" in any simple algebraic formulae. These peculiarities point to the existence of secondary phenomena.



WITH THE TRADE



Goerz Roll-Film Tenax

THE popularity of the vest-pocket and coat-pocket roll-film cameras appears to increase from year to year. To meet the demand, the C. P. Goerz American Optical Company, 323 East 34th Street, New York City, announces that it is able to supply the new $2\frac{1}{4} \times 3\frac{1}{4}$ Goerz Roll-Film Tenax with a choice of three Goerz lenses and Compur shutter. The workmanship, design, compactness and lightness of this new model should make an immediate appeal to the discriminating camerist. Further information may be obtained from dealers or by writing to the company.

Defender Photo-Supply Company

IN the advertising-pages of this issue will be found an announcement of the photographic specialties offered by the Defender Photo-Supply Company, Rochester, New York. This firm has been known long and favorably in the photographic trade and we are confident that readers of PHOTO-ERA MAGAZINE will receive prompt and courteous service. Interesting descriptive matter may be obtained for the asking.

Harold M. Bennett

SEVERAL years ago when many amateur and professional photographers doubted that a vest-pocket or hand-camera could be more than a plaything, Harold M. Bennett went about among the photographic dealers with a few samples of Ica Cameras. There was no denying the superior workmanship, compactness and effective lens-and-shutter equipment; but were these cameras made to stand the wear and tear of amateur photography? The question has been answered emphatically in the affirmative and to-day Ica Cameras are in demand. Harold M. Bennett, 110 East 23rd Street, New York City, will be pleased to send an attractive, illustrated catalog to those interested in high-grade outfits.

Grippit Still Making Good

IT is a pleasure to record the continued success of Grippit, the adhesive that does not wrinkle, that contains no water, that makes mounting photographs a pleasure and that has made good among practical photographers in all parts of this country. The Dewey and Ahny Chemical Company, 13 Harvey Street, North Cambridge, Mass., will be pleased to mail an illustrated folder to any amateur or professional photographer who is interested.

James H. Smith & Sons Company

ALTHOUGH every reader of this magazine tries to do his best with regard to correct exposure, there are times when conditions beyond his control occasion underexposure. Perhaps, the negative cannot be duplicated. In that event, recourse must be had to a reliable and effective intensifier. For many years, The James H. Smith & Sons Company, 3547 Cottage Grove Avenue, Chicago, has made Victor Intensifier, and we

are glad to say that our personal experience enables us to recommend it highly. Those amateur or professional photographers who possess a valuable, but thin, negative should obtain Victor Intensifier and convince themselves of its practical value.

Kalosat Lenses

THE soft-focus lens has come to stay in pictorial photography. There are those who cannot or do not use it to advantage; but there are many workers who find in it the means to portray the highest art in photography. The Hanovia Lens-Laboratories, Newark, New Jersey, have produced a spectral-diffusion lens, known as the Kalosat, which has enabled many workers to obtain the pictorial effects that they so much desired. A new, beautifully illustrated catalog is just off the press and the manufacturers will send a copy gladly to any reader of PHOTO-ERA MAGAZINE at request.

Amalgamation of British Manufacturers

AN amalgamation of interests has been made which, under the title of Amalgamated Photographic Manufacturers, Ltd., incorporates in a public company the following firms: Marion & Company, Ltd., Marion & Foulger, Ltd., A. Kershaw & Son, Ltd., Kershaw Optical Co., Ltd., Paget Prize Plate Co., Ltd., Rajar, Ltd., and Rotary Photographic (1917), Ltd. The house of "Marions" will continue to do business as heretofore. The amalgamation places this company in an even better position than before to supply all photographic requirements. In the meantime, orders and inquiries may be addressed to the new company or to Marions, as heretofore, at the registered offices of the company, 3 Soho Square, London, W. 1, England.



Rusty Lenses

JUST now a number of high-class lenses are finding their way into the hands of photographers, and in some of these which we have handled the glasses are rather badly tarnished or rusted upon the surface. This has little detrimental effect upon their performance, says a British cotemporary, especially with isochromatic plates; the only danger to be apprehended is from attempts to re-polish the surface. Some photographers imagine that friction with rouge or putty powder—the materials used in polishing—may be done with impunity; but there is a great risk of spoiling the definition of the lens by using such means. Moreover, it is as likely as not that the rust will persist in spite of the polishing. We have seen a lens in this condition which had been reground with emery and re-polished by the maker on which the stains were still evident. The best thing to do is to let well enough alone, and to keep the lenses in a perfectly dry place when not actually in use. The defect is caused by damp and will never occur if any condensation upon the surface is immediately removed. Tightly fitting caps for both ends of a lens are the best safeguards.

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DEVOTED TO
LENS AND SHUTTER
INFORMATION

Vol. I

APRIL, 1921

No. 4

A LENS THAT PAID FOR ITSELF

A certain professional photographer in Richmond, Kentucky, had heard a lot about the VERITO Diffused Focus $f:4$ lens. Most prominent photographers in the big cities were using it. And he wondered how Verito portraits would go in his small town. But he had doubts.

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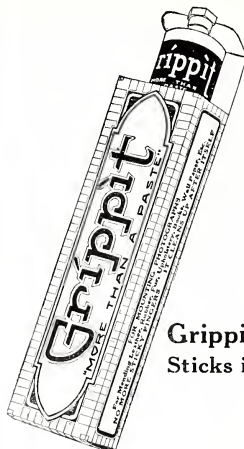
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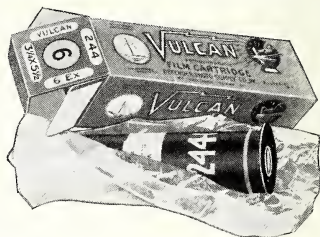
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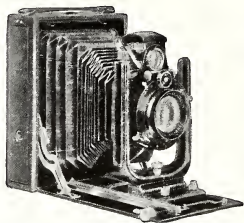
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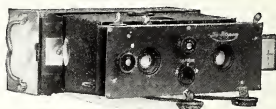
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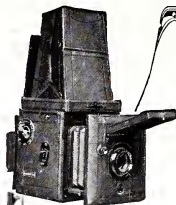
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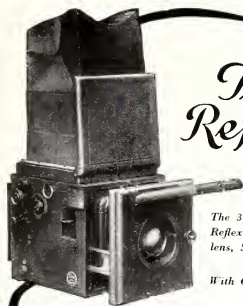
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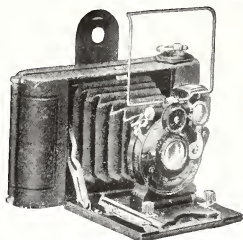
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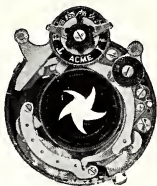
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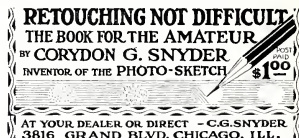
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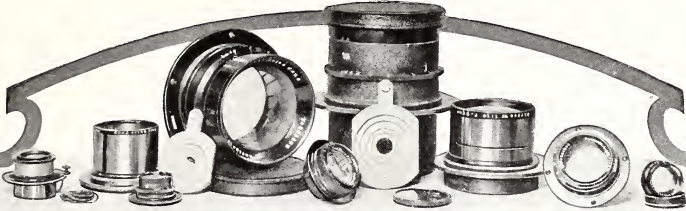


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Vol. XLVI

MAY, 1921

No. 5

The Eighth Pittsburgh Salon

JOHN PAUL EDWARDS



HE Pittsburgh Salon has established its position firmly as the premier American exhibition of pictorial photography—our national salon. And well-earned, indeed, is this honored position. It has been achieved only after years of hard, conscientious work by the same small group of Pittsburgh pictorialists who have directed and assembled the great annual exhibitions of which this is the eighth. I, for one, want to acknowledge the great debt that pictorial photography owes to O. C. Reiter and his splendid associates in this unselfish work.

This year's Salon is fully up to the high standard set in previous years. Having viewed at length the last three exhibitions, the writer feels qualified to pass judgment on the current one.

The average standard of quality of the work shown is higher than that of the exhibitions of 1919 and 1920. This is particularly true of the work of the newcomers and those comparatively new to the Salons. The veterans, the bigger men of photography, just about hold their own in this exhibition. In few cases, do they add to their reputation. Of the reason for this, more later.

There are more than ever of the artistic, may I say, the intellectually fine, pictures and less of the big, striking, forceful things which we usually expect from the bigger names in the catalog. Unquestionably, though, the general average of excellence is higher even if there are fewer outstanding peaks of pictorial greatness. Perhaps it is better thus, for the art's sake.

The jury of selection consisted of Dr. A. D. Chaffee, W. H. Porterfield and Samuel A. Martin—a thoroughly competent jury of unquestioned standing in the world of photography. Its work was most ably and thoroughly done. Whether a candidate was successful or unsuccessful, he can certainly feel assured that this year, his work was given most studious, sympathetic and careful consideration. If the judges did err, it was in most cases on the side of over-

generosity toward promising new workers. The jury accepted, for hanging, 360 pictures out of about 1200 or more contributed. This could have been well cut to about 275 with greater strength given to the exhibition as a whole. These 360 pictures represented the work of 136 pictorialists scattered geographically from Maine to California with representation from England and far Hawaii. As usual, the widely separated states of New York and California lead in the number of workers represented and in the number of prints exhibited. Thirty-eight workers from New York had 104 exhibits and thirty-eight workers from California exhibited 102 pictures. Pennsylvania follows next with 41 prints from sixteen workers, and Maryland comes fourth with 19 prints from six workers. Maine next with 16 exhibits, Illinois with 14, Massachusetts with 12 and Ohio with 11. The other states in our great country are either sparsely represented or not at all. Why is it, may I ask, that some of our biggest and most progressive states contribute little or nothing to the visible progress of the photographic art? Do their leading pictorialists "hide their light under a bushel" or are they laggards in their pride to their work and to their state? Assert yourselves! Let it not be said that pictorial photography thrives with honor only in the far east and the far west. Claim your place in the sun! All the better known media of photographic expression were represented. Gum, carbon, bromide, bromoil, chloro-bromide and what-not were grouped indiscriminately together, albeit peacefully and harmoniously. No one process stood out preëminently. Art is art, a picture is a picture, for all the process used. This incontrovertible fact is sometimes lost sight of these days in the fascinating pursuit of process print-making. Although an artistically strong picture can often be made more pleasing and wonderful by a printing in gum, bromoil or platinum, a bad picture is bad in any medium. The underlying idea, the personality expressed, the art

applied, are the things that count. Too many workers are following false photographic gods these days in their idea that the medium of printing makes the picture. Pictorial photography in America to-day suffers from too much attention and respect paid to technique and too little to art. The above dissertation is a conclusion drawn from the Salon in review. It forms one of the most pertinent reasons why photography is not making even more distinguished progress throughout the world to-day. Enough of preliminaries. Let us step into the first gallery and view the pictures on the walls.

The Pittsburgh Salon is without peer in the dignity and manner of its presentation. The two immense rooms of the gallery permit of generous, uncrowded showing and ample spacing of every print. All prints are shown under glass. The physical appearance of the exhibition is simply beyond criticism, other than the most favorable.

The first pictorial treat to attract our eye was Jerry D. Drew's "The Canyon," a powerful, subjective picturing of lower New York. A dark, canyon-like street filled with deep shadows contrasting golden highlights. It has the charm and force of a Brangwyn etching. His "Park Row" with interesting lighting-effects of vibrant sunshine is almost equally good.

That sterling artist, James N. Doolittle, again returns to the Pittsburgh Salon, after service with the colors, with six beautiful subjects. Of these the best were his Oriental characterisation "Le Penseur," an interesting Chinese head with an inscrutable expression, and his charming window-portrait "Miss Lois Wilson," a superb study, this, filled with mellow sunshine and of life and happiness. His "Waiting on the Set," showing a "movie" company *en repos*, is a splendid handling of a difficult subject, although a bit spotty in the highlights.

"The Silver-Lining," by Fannie T. Cassidy, is a low-keyed landscape presenting some weird tonal effects with intriguing highlights in the background. Her "Buds" and "Cotton" are charming plant-studies quite characteristic of her work. She endows her flowers with much of life and poetry.

Chas. K. Archer of Pittsburgh has yielded to the fascination of bromoil-printing. His first essays in this difficult process promise much. His "Furnaceland," a strong study with an obviously industrial theme, is strong—even dynamic. His "Wexford Village" is nicely seen and handled, a well-printed bromoil.

The Salon gains much by the return of Edward R. Dickson to the list of exhibitors. From the standpoint of the intellectual, the pure, æsthetic

art in photography, Dickson must stand as one of the really big men the camera has brought forth.

His "Dancers" is a veritable poem of life and joy. The arrangement of the graceful, laughing figures is superb and typically Dicksonian. His "Municipal and Woolworth Buildings," a beautiful genre showing children of the people at play in the streets against the shadowy background of huge buildings, is a splendid bit of life and light parading under the most prosaic title.

The more I see of Dr. Chaffee's bromoils, the more I admire them and the less respect I have for the average anæmic spotty effort turned out in this difficult process. For bromoil-printing, Dr. Chaffee stands absolutely alone in America. He obtains a "juicy richness" of printing which is unique and carries with great force. His subjects are filled with charm and interest and he handles them with the ability of an artist born. His "Rivington Street, New York," a street of the crowded slums pictured in a blaze of vibrant sunshine, is splendid and in a rather new vein for this versatile artist. Equally good are his "Ste. Enimie, Lozère" and "Kaysersberg, Alsace."

Fred'k F. Frittita of Baltimore has five beautiful prints of a peculiar richness of tone which affords beautiful values and fine carrying-power. His "Engines" with a most interesting effect of latent power expressed in the morning sunshine is forceful. His "Spanish Lady" is a beautifully-handled character-portrait. Louis A. Goetz of California is ever pleasing. He endows his work with much of poetry and lyric symbolism. I liked particularly his "Venetian Reflections," a bit different from his usual work. "Out of Darkness" shows that Goetz is one of the few who can picture the nude in photography with delicacy, poetry and beauty.

John Wallace Gillies shows some charming still-lives—five in number. I like to see stronger subject-matter and handling from this talented worker. His "Still Life—The Fan" appealed to me as the best.

Janet Allan of England displays four dainty bits of genre. Emily Hayden in her "Portrait—Elizabeth Patterson" offers one of the best portraits in the show. A superb picture in every respect.

W. A. Hudson of Los Angeles prints with exceeding strength and carrying-power in multi-gum. His "A Short Turn," showing swirling water behind a boat turning short, is a masterpiece of composition and print-quality. His "Fishing-Boats Ready for the Start" has a fine, rich, wet quality of water.

C. J. Crary of Warren, Pennsylvania, in his



LE PUY, HAUTE LOIRE
A. D. CHAFFEE
EIGHTH PITTSBURGH SALON



WEXFORD VILLAGE

CHAS. K. ARCHER

EIGHTH PITTSBURGH SALON

"Winter-Hillside," offers a clever winter-landscape with an appealing design, worked out by dark fences against a background of snow.

Mercedes Desmore of New York shows nice print-quality in her "Still Life—The Tea-Pot," as does Wayne Albee of Seattle in his two "The Crystal" and "A Book of Verses." Another print of pronounced quality is "The Harbor" by G. M. Allen of Portland, Oregon.

William A. Alcock of New York City offers a gem in his character-portrait "Bill," a splendid thing worthy of illustration for a Dickens or a Thackeray. Alcock's work promises much.

The trend of photographic portraiture is not wholesome. We are getting bravely away from painted backgrounds, carved chairs, head-rests, painted rocks and other accessories and instruments which for years have cluttered the studios of Main Street. The portrait-work of to-day, as exemplified by the many fine examples in this Salon, is becoming more of an art than a commercial pursuit. For this pronounced advance let us thank the amateur, the enthusiast; for, assuredly, he has pioneered the trail.

Among the many excellent portraits here at Pittsburgh about which much of praise could be

written, several seemed to me to be particularly outstanding on the strength of their appeal. Two dainty little portraits, miniature, by Mrs. J. D. Drew of Montclair, New Jersey, are worthy of highest praise; they are of exquisite charm and most satisfying. Alice Boughton, New York City, offers an interesting characterisation in her portrait "Gilbert K. Chesterton."

Yosci Amemiya's "Portrait of John Wallace Gillies" is splendid in the strength it receives from a bold crowding of the picture-space. Leo J. Buckley of Binghamton, New York, offers a most interesting portrait of an old man in his "In the Nineties." Rabinovitch of New York City exhibits an interesting and sympathetic portrait of our worthy fellow-pictorialist, Dr. A. D. Chaffee, a splendid portrait of a splendid character. C. R. Mandeville of San Francisco has one of the gems of the exhibition in his dainty "Portrait—Lucia de Lavia."

"The Prophet," by Oscar Maurer of Los Angeles, a virile character-study, is most satisfying in its strength and richness of print-quality. Otis Williams of Los Angeles offers another interesting characterisation in his "Spanish Boy." Dr. T. W. Kilmer of New York City offers some

new ventures in the field of gum-printing and broadprinting-effects from paper-negatives. His portraits 173 and 174 carry well; but I prefer his "Night-Lights," a charming landscape of the night with twinkling lights showing over the water. Karl Tausig of New York City gains strength over previous showings by his six prints in this year's group. His portrait "The Poet" and an appealing genre, "The Climax of the Story," appear to me as the best of his group.

scape—simple in conception, beautifully executed—is one outstanding picture of the Salon. This, with his "Sun-Maid," the head of a laughing girl, that well merits the title, and his "Dolores," a portrait-head, most cleverly placed in the picture-space, are the best of a strong group. Another Chicagoan, Paul Wierum, has an interesting bit of action in his picture of an approaching train, "Finley Siding." J. D. Boyer of Los Angeles exhibits a delicate, decorative landscape, "Vista



DRAPED STUDY

ARTHUR F. KALES

EIGHTH PITTSBURGH SALON

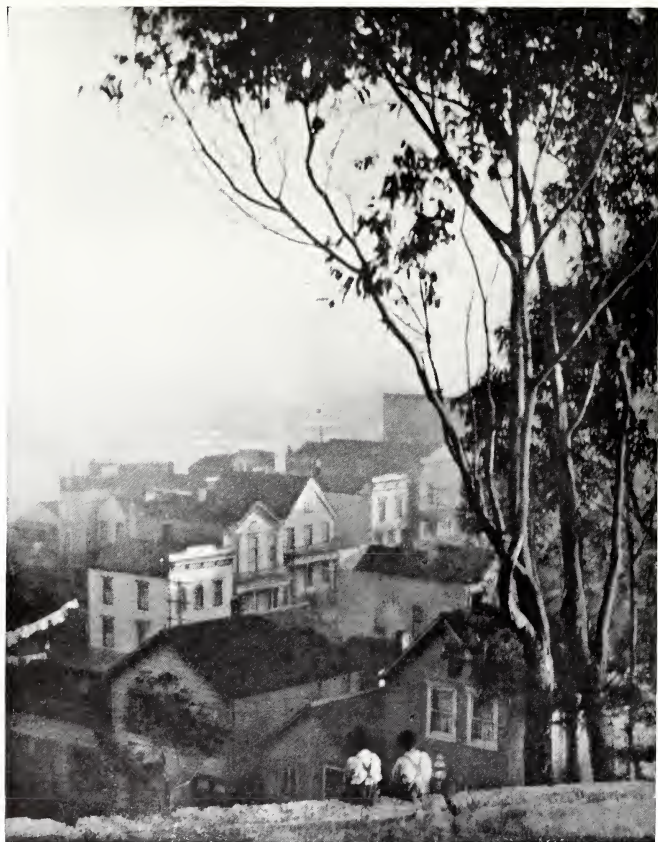
Walter C. and Thomas M. Jarret of Pittsburgh collaborate most successfully in their "Portrait of a Child" and "Portrait of a Little Girl." The print-work has an etching-quality, charming and distinctive.

G. W. Harting's (of New York City) portrait "Sarah," is most commendable. V. E. Duroe of Brooklyn exhibits four virile, interesting prints. His genre, "Sunday Afternoon" and his portrait of an old man, "The Patriarch," are his best.

George Henry High of Chicago exhibits a group of five pictures that comprise the best showing I have yet seen from this promising worker. His "Summer-Breezes," a charming, simple land-

scape of a Lake." A charming example of landscape-photography.

Portland, Maine, has become rather a center for workers who express their ideas and ideals in the difficult process, multi-gum. From this locality hails a newcomer to the Salon, M. U. Bregon, whose work shows constructive and print-making ability of a high order. His "Light Beyond" and "Spirits of the Wayside," are big, weakened by the inclusion of "At the Summit" and "Mountain-Glow." Where art is happily combined with technical skill, the multi-gum is the most wonderful of printing-media. Too often, the printing-process becomes of paramount



TELEGRAPH-HILL
JOHN PAUL EDWARDS
EIGHTH PITTSBURGH SALON



interest and the underlying art which, after all, is the heart and soul of any picture, is lost sight of in the fascination for brilliant print-technique.

Francis Orville Libby of Portland, Maine, handles big themes in a big way. His "Fifth Avenue—Rain" is a forceful picture fairly breathing the big impressiveness of the great city—a subjective picture worthy of a less prosaic title. His "Sea-Way" is rather the best marine in the exhibition, fine in construction and a most beautiful print. I cannot like his other three as well as these; perhaps, the first two set too high a standard of comparison.

Dr. Rupert S. Lovejoy of Portland, Maine, is at his best in his "Nocturne—The Temple," a print filled with the charm of mystery and poetry. The work of Arthur F. Kales of Los Angeles is always interesting and convincing. His handling of figures and accessory-draperies is masterly. As for rich print-quality, he has few equals. His "Draped Study," a graceful arrangement of two charming subjects with a beautiful rhythm to the lines of their draperies, is the best thing of its kind at the exhibition. His "At the Kiddies' Ball" is equally good—a typical Kales genre with great beauty of theme and handling. The pictures of Margrethe Mather of Los Angeles are, first of all, refreshingly original. One seeks her work at the salons with anticipations of rare pleasure, and one always sees in her pictures much that is new and inspiring. I enjoyed all of her group of five; but her portraits, "Judith," "Frayne Williams" and "Evgenia Buyko" left a particularly pleasing impression.

C. J. Marvin of Los Angeles has a mighty good pastoral in "Watching His Flocks," a shepherd on a hillside watching a flock of sheep grazing in the valley below—against a background of rolling hills.

W. H. Porterfield of Buffalo might well be called the Dean of American Pictorialists. No salon seems to be complete without a group of his prints. The work of no man is better known. Of the strong group of six hung at this year's Salon my choice would be "Over the Valley of Hudson," a beautiful moonlit landscape, typically Porterfieldian. Three Pittsburgh studies, depicting groups of lovely cottages in the shadow of the steel-mills, are interesting and quite different from his usual works.

Ernest M. Pratt of Los Angeles has the discriminating vision of an artist, and this faculty is strongly impressed upon his work. His pictures are highly subjective, often purely aesthetic in their handling. His "Quiet Traffic Hour" is one of the really good things of the show. His camera looked down upon a city-street with

auto-tops spotted here and there like big beetles. The result is novel and interesting. Some rich strong shadows contribute quality to the picture.

Wm. Elbert Macnaughtan of Brooklyn has impressed a certain personality upon his work. His landscapes are veritable poems—simple in their elements, delightful in theme, with a most delicate print-quality in textures and tonal values. Without injustice to his others, may I express my preference for the smiling sunshine in his "Lowlands" and the pictorial charm of his beautiful pastoral landscape, "Plowing," which picture is among the gems of the exhibit.

Louis Fleckenstein of Los Angeles assuredly sent six of his best this year. They represent this clever pictorialist at his best. Fleckenstein has evolved a unique and very convincing double-toning effect on chloro-bromide papers which give much of his work the quality of some of the old Italian masters in their richness of browns and blacks. His "Lost His Dog," a grieving boy as per the title, is one of the best genres in the show. His portraits, "Mlle. Rubino" and "Johnnie," help to make this one of the outstanding groups of the Salon.

A. R. Gurrey, Jr., of Honolulu makes his debut at Pittsburgh with five interesting subjects rather characteristic of Hawaii. They are very good and most satisfying, particularly his beautiful picture of mother and child on the ocean-sands, "Thetis and Achilles." I am hoping that next year he will send us some of his interpretative pictures of Hawaiian life and people—particularly his boatmen. Forman Hanna of Globe, Arizona, with his wintry-landscape "Deserted" has produced a rare, delicate quality of snow-values. The decorative landscape "California," by Anson Herrick of San Francisco, with its wind-harp of tall, spindly eucalyptus trees makes me fondly reminiscent of my beloved state. It is beautiful in theme and handling.

Two of the men who have helped to make Baltimore a focus of pictorial progress are Holmes I. Mettee and Remick Neeson. Mettee excels in figure-studies, which he usually exhibits in a rich, full-toned carbon-print. In this Salon he has the generous showing of six fine subjects. His "The Singer" shows a particularly interesting play of light and shade. Neeson exhibits three beautiful carbonos which are up to his best standard.

Of the enthusiastic Salt Lake City group is Thomas O. Sheckell, who has three strong pictures, the best of which is his "Down-Shore Industry," a busy shipping-scene of compelling interest. And likewise from Utah comes L. A. Olsen of Ogden, whose beautiful winter-landscapes have brought him well-earned distinction. His delicate "Winter-Landscape" is nicely con-

structured with beautiful pearly values in the snow which are unusually well rendered.

Edward Weston of Glendale, California, is a master of aesthetic design in portraiture. With inimitable genius he constructs the designs of his backgrounds and the contributing accessories of his portraits from sunbeams, shadows, plants, furniture and what not. No two of his portraits are alike, all interesting—sometimes startling in their originality. His "Ramiel in His Attic," is a gem of cleverness. It should fairly startle the conventional portraitist and leave him gasping.

Ernest Williams of Los Angeles ever sings of the beauties of nature in grand old California. He constructs his pictures of the brilliant sunshine and deep, alluring shadows so characteristic of this wondrous region. His group of six shows him at his poetic best. If I may pick favorites, they are his "Sentinel of Gloom," his charming rural landscape, "The Homestead," and his "Easter Morning" with its rich play of light and shade.

Another whose work breathes a fine feeling is N. S. Wooldridge of Pittsburgh. His "Foreign Quarters—Pittsburgh," an interesting study of the hill-district of his native city, and his genre, "Friends," are splendid. However, his strongest work is his splendid landscape "Vista of the Alleghenies" with its delicious aerial perspective and well-handled planes.

William H. Zerbe of Richmond Hill, New York, exhibits two interesting bits of New York, "Old Paper-Alley" and "A Vista from Queensboro Bridge." In every way, these do credit to this talented veteran.

Fred R. Archer of Los Angeles has done such fine, thoroughly original work that we hate to see him or any other of our California friends using Simon-pure "movie" settings as the basis for an exhibition-picture. When such are used, we are in grave doubt as to whom belongs the credit for the success of the effort—to the staff of the picture-company who conceived and executed the elements of it or to the pictorialist who merely recorded the ensemble. However, his "The Arch" is beautiful in conception and execution, regardless of the origin of the material. His "Illustration for the Arabian Nights" is a delightful collaboration.

L. D. Carter of Oak Park, Illinois, a name rather new to me, exhibits four prints which are really worth while. "The Ore-Bridges" is a splendid night-picture of convincing strength. His "Night-Express" is filled with dynamic action, and his dancer, "Columbine," is a most dainty study handled in a refreshing manner. The San Francisco bay region contributes some very interesting things to the exhibit which bespeaks the

revival of pictorial enthusiasm in that locality. These same workers in San Francisco of great talent, and with wonderful landscape-material at their very door, we should expect much from in the future. Among the really excellent pictures from that well-favored region, I noted: John A. Hickey's "Interested;" Horace L. Hirschler's "The Bubble Fortune," which pictures a push-ball game at college, filled with sportive action; H. A. Hussey's "Silhouette" and "Sunset-Hour;" Charles A. Love's "Midway Point—Monterey;" Helen Macgregor's highly interpretative portrait of the great Sadakichi, Hartmann; M. J. Mortigia's "The Balloon-Vender;" Otto C. Schulte's splendid bit, "A California Landscape;" W. H. Stephen's "A Summer-Cottage;" and J. R. Wilding's "Through the Door," a splendid bit of architectural photography with delicate tonal qualities in the print.

Lou Sweet of Minneapolis is a most successful professional portrait-photographer who spends his spare moments making fine pictorial things like his "South Wind in the Milling-District." In his pursuit of the pictorial, he has all the uncontrolled enthusiasm of the most rabid amateur. His dynamic picturing of the energy and life of the great flour-milling district gives us the best industrial picture in the show.

Dr. D. J. Ruzicka of New York City, in his strong group of six studies of the "Pennsylvania Station—New York City," exhibits the strongest architectural group in the Salon. All these pictures have highly subjective charms aside from the beautiful rendering of architectural line and form. Some of these pictures, filled with atmosphere, sunshine and mystery, remind one of some temple of ancient Rome rather than of a prosaic railroad-station of to-day. With these six pictures Dr. Ruzicka has said the last pictorial word about this interesting building.

To O. C. Reiter of Pittsburgh, more than any other individual, belongs the credit of inception and success of the Pittsburgh Salon. With tireless energy and boundless enthusiasm, he has worked for about eight years to make this the great national salon that it is to-day. Amid this continuous work and his extended business-activities, he finds time to make some splendid landscapes with an individualistic quality of delicacy and refinement. Such are his "Summer Landscape", a picture of rare charm, and his attractive genre, "Work Ahead."

One of the best pictures of New York that I have seen this year is William Gordon Shields' "Early Morning in Wall Street" with its splendid feeling of municipal bigness and its patriotic array of flags in decorative arrangement. Three other subjects go to make up a strong group.



SUMMER-BREEZES
GEORGE HENRY HIGH
EIGHTH PITTSBURGH SALON



H. Y. Simmons of England sends us a strongly pictorial subject in his "A Feudal Castle"—a beautiful print of rich shadows picturing a fine, impressive old baronial castle on a hill-top. Janet Allan, likewise from across the sea, sends us four delightful genres.

Richard M. Coit of Brooklyn shows us interesting textures in his "South Porch." Lillian M. Hobart of Northborough, Massachusetts, has three dainty things redolent of their New England origin. Of these, I like best her "Shaw House—Plymouth," which shows nicely grouped trees and interesting shadows on a white house.

Dr. Charles H. Jaeger of New York City is continually proving to us how little mere size has to do with the success of art in photography. He produces intensely interesting pictures in a size about 4 x 5, gums or Artatones as a rule. They have much personality, rare quality and are most satisfying. Of particular note this year was his "The Dock."

A. H. Jones of Honolulu is best in his poetic, "Mid-Pacific—Moonlight." E. C. Kenton of Los Angeles records progress in his three subjects. August Krug of Brooklyn has a splendid night scene in "The Portal." Sophie L. Lauffer of Brooklyn has a rare faculty of picturing odd, interesting bits of New York with a charm of interpretation characteristically her own. Her "Milligan Place" is fairly redolent of the charm of old New York. Reuben Miller, Jr., of Pittsburgh has a delicately handled architectural bit, "The Latticed Door." N. P. Moerdyke of Los Angeles has a rich multi-gum, a harbor-scene "In the Lee of the Wharf." Miss A. H. McLean of New York gives great strength and a fine feeling of wave-motion in her "Surf." Jane Reece of Dayton has a strong group of five, of which my choice was the clever arrangement, "Have Drowned My Glory in a Shallow Cup."

John C. Stick of Los Angeles continually shows progress. His portrait, "Marie," is particularly successful.

Alfred S. Willson of Brooklyn shows fine bromoil-printing in "Vale of Cashmere."

I regret that friend Editor of necessity limited the size of my review, which limit has long been passed and I had a lot of nice things to say about

other excellent works of which I especially call to mind: "Head of a Girl" by Edmund Rickett; "Uncle Rastus" by F. Schanz; "Fishing-Boats" by H. V. Schieren; "Out of the Mist" by Philip Stayner; "The Railway-Station" by Everitt Kilburn Taylor; "A Nook at Valley Forge" by Mrs. H. J. Wiegner; "The Print-Maker" by C. W. Covina; "Winsome Jack" by W. W. Zieg; "Roadside Home" by Chas. H. Partington; "The Brooklyn Bridge" by Joseph Petrocelli; "Canyon of a Great City" by Louise Bell Rau; "Beside the Still Waters" by R. C. Lewis; "Spring Landscape" by Millie Hoops; "Fog on the Range" by Alfred Brinkler; "A Snow-Storm" by Dwight A. Davis.

John Paul Edwards has three pictures exhibited. Of these three he prefers his landscape of the Monterey coast "The Venerable Cypress;" but his good friends at Pittsburgh chose his "Telegraph-Hill—San Francisco" as the best of the three. So be it!

Pictorial photography is going ahead, slowly but definitely, with progress recorded along sane, wholesome lines of thought and expression.

Of late, there have been entirely too many exhibitions open—annual exhibitions and salons. The effect of this over-promotion of the exhibition-end has been to dissipate the efforts of our leading workers; to encourage over-production and careless selection; to lower the standards of the men who should lead in the march of pictorial progress. Our big men are becoming blasé, disinterested, and their work shows it.

This is not given as a note of pessimism; but with the hope that it may awake some realization of conditions which will lead to its improvement.

We should raise our own standards; should not be satisfied with every casual effort; should study the elements of art; should select a printing-process fitted to the ideas and ideals we want to express and not flit inefficiently from one process to another. What we do, let us do well.

The Pittsburgh Salon has proved itself worthy of our best effort, our strongest support. With the hope that it may raise standards of acceptance, already placed high, let us look forward to innumerable years of success and progress for this great national salon of photography.





NUMBER 1 (ORIGINAL STATE)

WILLIAM S. DAVIS

Controlling Tone-Values by Compensating-Positives

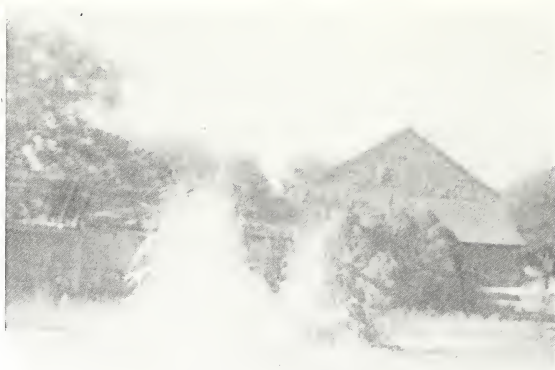
WILLIAM S. DAVIS



AMONG the various methods employed to control contrasts and to alter local values, the use of "compensating-positives" will probably be new to the reader; for, I do not recall having seen this method of control described as I apply it to negatives. The idea suggested itself to me as a result of reading an account some years ago of toning-down highlights in lantern-slides by using a plate that bears a very weak negative-image in those parts that need to be lowered in value as a cover-glass. Naturally, I thought of the feasibility of reversing the method and controlling the printing-quality of a negative by superimposing a positive-image where darker parts of the subject should be made to print lighter.

By this means the contrast of the whole negative can be lessened when the entire positive-image is retained; or, local modification may be produced by clearing away such parts of the image as do not need changing in the picture.

Briefly, the process consists in making a transparency from the negative, and binding this in perfect register; the effect is determined by the strength of the positive and the amount of the image retained. When one stops to consider that a positive contains the same series of tone-gradations as the negative from which it is made—only in inverse ratio—it is obvious that when the two are brought together one image tends to neutralise the other, even to the extent of reducing the whole to a single flat tone if both images are perfectly balanced in density. The latter, of course, is not desired for the purpose under consideration; but it shows the amount of control which can be exercised by varying the strength of the positive-image and thus making it possible to obtain any degree of softness in the negative. One of the advantages afforded by this method is that the negative is not permanently altered in any way, so that if the first trial does not produce just the effect desired, no harm has been done to the negative-image, as



NUMBER 2 (COMPENSATING POSITIVE)

WILLIAM S. DAVIS

occurs sometimes when local chemical methods are applied unskillfully.

This is the only means with which I am acquainted that enables the worker to lower effectively areas in the negative that contain much intricate detail in contrast without making the general tone of such parts darker in the print. Flat shadows in a negative which print too deeply can be lowered very well indeed by applying an aniline-stain with a brush; thus reducing the printing-speed. When any such part contains a lot of detail that shows too much contrast, it is nearly, or almost, impossible to pick out only the thin spots and avoid lapping over on to the minute details which already are dense enough. The general contrast within a given area can be lowered, it is true, by applying locally the ammonium-persulphate reducer; but as this cuts down the denser spots, the effect is to make such a section which has been locally treated print darker in its general tone than before. When one wishes to flatten the light and shadow in middle-distance or distance, this generally produces just the opposite effect to that desired. For in most instances, such parts of a scene need to be made to print lighter in the interest of good aerial effect. Consequently,

the reduction of contrast should be obtained by adding to the density of the thin details.

The entire problem of obtaining good aerial quality—the feeling of separation between parts of a scene, and their gradual retirement to the limit of visibility—lies in a reduction of tonality and contrast from the foreground to the extreme distance. Upon looking at an open stretch of country, there will be seen not only a gradual decrease in general strength of tone and color as objects recede from the eye; but there will be apparent a concurrent reduction of contrast in individual parts as well. Fog or mist increases this effect materially at short range. Such a change of values gives the key to the creation of atmospheric quality in a picture; and, if such a gradual reduction of tone and contrast can be brought about by exercising control over the character of the negative, it becomes possible to introduce aerial effects which are barely indicated in the photograph as originally made. Although some may claim that this is not “straight photography,” there is no denying that the result is obtained by purely photographic means.

Perhaps, the simplest way to describe the working-details of this method will be to explain

how I modified the effect in the negative used in making the illustrations.

Number 1 shows a straight print from the negative, printed by contact on a glossy grade of bromide-paper to bring out all the gradations of tone that were present. Before attempting local modification by any method, one should, of course, have a definite idea of where the defects lie and the steps required to remove them. In the present instance, examination of this illustration shows too close a similarity of tone between the shadow-side of the corn-stack in

but the contrast of light and dark in them flattened as well. Therefore, I placed the negative in an ordinary printing-frame; laid a dryplate of the same size face down upon it—a Stanley Commercial was used; but any medium speed or rapid plate will serve the purpose—and both shoved into one corner of the frame before locking the back. An exposure of one second was then given at thirty inches from the kerosene-flame of the darkroom lamp—the burner of which takes a 5/8-inch wick. If preferred the exposure could be made by burning



NUMBER 3 (THE FINISHED PRODUCT)

WILLIAM S. DAVIS

the foreground and the trees and barn which constitute the background, and thus a sufficient separation to convey a sense of space and atmospheric perspective is prevented. There was some thin haze rising on the October morning when the negative was made, but not enough to subdue the tone of the background; although, to the eye, there seemed to be adequate feeling of space—due, probably, to seeing the subject by binocular vision—but the photograph could give only a monocular impression. To correct this condition, the building and trees needed to be made not only lighter in their general tone

a match at about the same distance. Exact timing is not so important as is the case when making a good lantern-slide or transparency of full strength; for the main object is to obtain simply a *soft, weak* image. The exposed plate was next developed in an ordinary M.Q. solution until a feeble image became visible; it was then fixed as usual. After rinsing the plate slightly, a strong reducer was made up by adding a considerable quantity of potass ferri-cyanide to a plain hypo-solution, of about one-to-five strength. As such a mixture deteriorates rapidly, only a small amount should be mixed

at a time. A fresh lot should be prepared when the previous one loses its bright lemon-yellow tint, or turns blue. The ferricyanide and hypodermic solutions will keep separately. After mopping the surface of the plate as dry as possible with a soft wad of absorbent-cotton, all parts of the image that were not needed were dissolved away by applying the reducer—using a tuft of cotton for the broad surfaces and a pointed camel-hair “quill-pencil” to work-up close to the edges of outlines. The part of the image that was removed included the foreground, nearest corn-stack, and the lighted side of the next one. To see how matters are progressing, a sheet of white paper—or white tray—should be placed where it will be illuminated brightly and the plate should be held several inches above, keeping the surface in a horizontal position to prevent the solution running where it is not wanted.

After I had finished this manipulation, the positive presented the appearance shown in Number 2. There may be a slight difference in the strength of the image as here shown, due to variations introduced by the engraving-process and the fact that the halftone had to be made from a paper-positive instead of the transparency itself. But the amount of image left is the same, and, in any case the strength of this positive must be regulated by that of the negative with which it is used.

The final step was to place the positive and negative face to face and move them about until the images registered perfectly. After obtaining this, the two were gripped tightly between the thumb and fingers of one hand while narrow strips of gummed-paper were applied to all four sides, in a manner similar to lantern-slide binding, although it is not essential that the strips cover the edges completely, for short lengths of binding will hold the plates in register. Should one prefer to keep both hands free to apply the binding-material, the plates can be held together with a couple of spring clothespins or photo-clips.

The effect of the compensating-positive is revealed in the finished print, Number 3, made on the same grade of paper as the first. The improvement in atmospheric quality is very

striking; for one can fairly feel the space between planes of the subject.

One question which will come up is, what effect does the thickness of the glass-positive have upon the definition of the image in contact-printing? Of course, this will cause some diffusion in the print, which may or may not be a desirable thing to have; but it can be reduced to the minimum by keeping the printing-frame stationary while printing and a considerable distance from the light. This helps to overcome the blurring which comes from the light-rays that pass through the negative at a diverging-angle from their source—those which pass from negative to paper are nearly parallel when the former is several feet from the light. Number 3 was printed by contact at a distance of twenty-four inches from the light; and what softening occurred seemed rather to improve the effect. If this is considered an objectionable feature, it can be prevented by making the prints in an enlarging-camera or using a cut-film for the positive, instead of a glass-plate. The Eastman Commercial- or Portrait-Film can be used; but I find it more trouble to hold the film in perfect register while attaching the binding—owing to film's tendency to buckle—which makes it a little difficult to determine when perfect register has been obtained.

Only a *very thin* image is needed to produce considerable correction of tone; but until some experience has been gained it might save trouble to make the positive a little deeper than is thought necessary. Then if it proves upon trial to be too strong, the plate can be immersed in a weaker bath of reducer than that used for local clearing, and the entire image brought down to the proper density.

Dense shadows in the foreground of some subjects can be modified by the foregoing method; but to avoid undue flattening of local gradation within the shadow—which is not usually desired when part of the subject is near the observer—the positive should be made *very flat* to prevent neutralising such gradation. This is readily done by overexposing, and stopping development as soon as the image is strong enough to furnish a guide for the application of the reducer when one is clearing away the part not required.



Life in Portraits



HAVE just been looking over a number of portrait-photographs by different camera-artists in diverse styles and qualities, and I am struck by the fact that only a few of them have a real "live" appearance. In the others, there is nothing to convince the spectator that they are actually from life and not from models or drawings. There are three in particular, which, when placed in a line, show very plainly the point I am concerned with at present. No. 1 is a bust of an obviously theatrical person. The head is certainly a round and solid object; but to know that it was photographed directly from a human being, I must depend on logic. An identical result could be got from a wax-model. No. 2 is different. A man's head, but certainly not solid. Looked at from some little distance, it might have been made from another photograph or from an engraving; but close inspection leaves one in doubt of either. I happen to know that it is a "direct"; but it has neither the brilliance nor texture that always belong in some degree at least to human skin. Of No. 3, I know nothing except the bald statement made by the print itself. But that statement says decisively that the subject was alive—and fully alive—when the picture was made. It is interesting to note that this photograph does not appear otherwise to be as expensive or "classy" a production as either of the others.

Now what determines this live appearance in a portrait photograph? It is governed by the same elements that rule the production of good work in general, and so is sometimes obtained unconsciously. But it can be made a regular thing by any good worker, and need not be left to our leading camera-artists as an exclusive feature.

The first thing is, naturally enough, a live appearance about the sitter, and this goes a long way, but nevertheless is not a *sine qua non*. A live expression on the face is more important. Every operator has—or should have—his methods of getting desired expressions; but for the benefit of those who need a hint, I can recommend the following. Having got everything ready for the exposure we address the sitter, regardless of empty grins or bored looks, something like this. "Now, Sir (or Madam, as the case may be), please keep precisely as you are for another moment. You look fine (or beautiful, as the case may be)." The sublime expression which invariably dawns has to be seen to be appreciated.

A sitter's complexion also affects the results we are aiming at. There is little or no white in human flesh and skin, which may show red, pink, purple, brown, cream, blue, green and other tints, and on this account color-sensitive plates are more likely to preserve the living appearance than color-blind plates can. At the same time, excellent results are obtained on plates and films which are not—or are not supposed to be—color-sensitive. I have mentioned films; which reminds me that halation alone can destroy the live quality of a picture, and therefore a non-halative plate or film should be used.

Exposures should be as nearly exact as possible. Neither under- nor over-exposure will get the best scale of gradation from the latitude of any emulsion, though the last is not so detrimental as the first.

Lighting, for general work, should be full and plentiful without being flat. An expansive and high supply of diffused light with a small point of direct light somewhere near its center is a rough description of a simple and effective form of lighting. Reflected light must be controlled by very deliberate inspection, and if it can be done without, so much the better.

Great depth of focus and pin-sharp definition all over are not required. Soft focus and a suggestion of fuzziness around outside edges give an impression of movement which is almost essential. At the same time, decided unsharpness is not wanted or of any use. Any lens other than one designed for portrait-work should always be used at full aperture to avoid "still-life" definition as much as possible.

Provided we can develop intelligently, there is only one point to consider here. If we are not using a non-halative plate or film, quick development in normal developer is calculated to give cleaner highlights than very slow action in a tank of diluted solution. The former will bring up the picture before reaching the halation, the latter will penetrate the emulsion before getting to work properly on the image. The necessary amount of development will depend on the grade of printing-paper favored. If this is soft, a fair amount of contrast must be developed into the negatives; for vigorous papers the development should be somewhat curtailed.

Retouching has a lot to do with the final result, particularly if ordinary plates are used; and here are three points for the retoucher who is not an expert. First, there is usually a highlight within a highlight in nature, or, in other words, highlights are not even spots or patches,

but are composed of gradations. To emphasise this by inserting smaller "higherlights" in the highlights of a portrait will help considerably provided it is not overdone. Second, light playing on a person's eyeballs can give the spectator quite a decisive impression of life, and this applies also to portraits. If the whites of the eyes and the points or triangles of reflection in the pupils are inconspicuous in the negative, much can be done by the judicious addition of a little retouching-lead. Third, the style of work is a factor. Retouching which prints like wire netting or a layer of dust destroys any impression of life. To use an Irishism, retouching is most useful here when it is absent; but if a negative really requires decisive retouching, the shape and direction of the strokes are important. I have always got the best results by restricting myself to short lines, straight and curved running in the (curved) directions that the grain of the skin seems to take—horizontal on the brow, vertical at the temples, oblique on the cheeks, circular around the chin and across the hands. I find the nose is best treated with horizontal strokes, though the inclination is to work vertically.

Of printing-mediums, those of the slow-development type are at least as good as any, and of surfaces, mat and semi-mat for small

heads, semi or rough for large and "Royal" or "Cream Crayon" for extra large. Warm blacks, warm sepias and prints on cream base are naturally suited to representing skin, though strictly speaking, the effect can be obtained on even the bluest black and white if the negative is very good. I have yet to see a harsh picture that was "alive" though Rembrandts and silhouettes are the easiest styles to produce with life. They can, however—and must—be soft, in spite of their brilliant lighting. I have seen flat pictures that were full of life; but softness without flatness would have improved them.

Color, like warm tones, will add to the impression; but the coloring must be fundamentally correct. The cream must be there, and the reds and pinks must not be opaque or overdone, whereas touches of blue in the highlights and blue and green in the shadows—although this may sound unnatural to those unacquainted with painting—are almost certain to be wanted.

In conclusion, I should like to point out that though it is not possible for every one to emulate our photographic geni, we can all strive to improve the quality of our work; and attention to such details as I have enumerated will greatly help to improve our photographic work.

Thermit, in *British Journal*.

Fundamentals of Print-Criticism and Appreciation

Part Five—Lens-Quality

AUGUST KRUG

MOST people are attracted to photography because of the facilities it affords for faithful delineation of every-day objects. The ideal of the snap-shooter is realised when he can make consistently fully-timed, needle-sharp negatives. The demand for sharpness has resulted in the production of the ultra-anastigmat lens: fast, heavy, bulky, and giving images of a sharpness so exquisite as to transcend the capacity of ordinary sensitive material to render adequately. Then, as every one knows, the reaction came, and lenses are now made which give images as far removed from anastigmatic images as possible. Naturally enough, each of these types of lenses imparts a distinctive quality to the pictures made with it: the proper use, or misuse, of the lens determines whether the lens-quality is good or bad.

There is a slogan which embodies a partial

truth, to the effect that "It's all in the lens." Good pictures may be made with any lens, and in that sense the slogan holds good. However, pictorial workers will agree that it is not the lens so much as the way it is handled. As critics of photographs, it behooves us to know how the various lenses should be handled to give truthful, realistic representations, and to get the best possible results from the lenses themselves. The prints submitted to us are fully able to convey to us all we need to know about the manipulation of the objective which made the picture; and, furthermore, whether its manipulation was correct.

With sharp lenses in general, and anastigmats in particular, it is a comparatively simple matter to determine whether or not the lens has been used correctly. The picture is either sharp or out of focus—"slightly out of focus" need not concern us here. If a person has average eye-



OUTDOOR-FIGURES
FIGURE 1
AUGUST KRUG





GLADYS

FIGURE 1

AUGUST KRUG

sight and is not too easily satisfied, perfectly sharp pictures can be made time after time, by using a camera fitted with a focusing-screen.

There is another factor which enters into the question of sharp-lens focusing, which, although quite a problem in the olden days, does not seem so troublesome now. I believe it was called "differential focusing," or some such name; the idea was to adjust the focus so that the most important object in the picture was the sharpest, the others to be unsharp or diffused according as they were to be subordinated. Manipulation of both the focusing-pinion and the diaphragm-lever was necessary to obtain the desired result. Something of the sort survives in the depth-of-field tables and attachments for the hand-cameras now so much in vogue; but, of course, the accuracy possible with the groundglass-method cannot be expected with the film-cameras.

On account of the short-focus lenses fitted to pocket-cameras, focusing becomes a simple matter if the aim is to get everything as sharp as possible. If subordination of non-essentials by diffusion or absence of critical focus is attempted, the lenses of longer focal length and the employment of a camera equipped with a groundglass-back is recommended.

The tendency of American pictorialists is toward the universal employment of the diffused-focus lens, but the rest of the world conservatively adheres to the older type of sharp lens. In the unheeding, unremitting use of the pictorial lens, it would be well to remember that it is in no way a universal objective; it can never replace the anastigmat, and there are many subjects which even for pictorial purposes can be done better with an anastigmat than with the best soft-focus lens extant. After all, the pictorial lens is simply a tool to introduce a



FIGURE 3



FIGURE 4

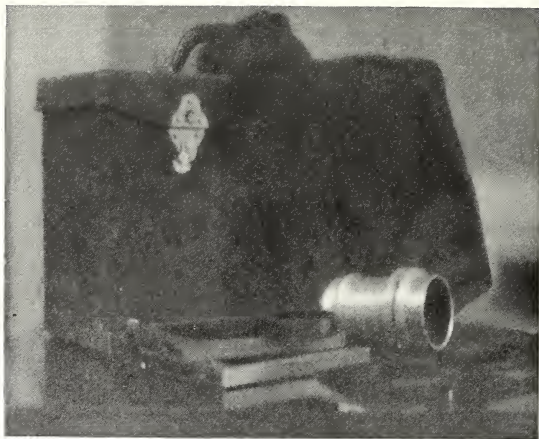


FIGURE 5

certain amount of distinctive diffusion or softness in the photograph, which latter must possess all the essentials which we have considered as entering into the construction of the true pictorial photograph—whether made with a sharp-lens, a soft-focus lens, or no lens at all. As a tool, therefore, it is to be used with judgment and a due regard for its limitations, of which it has many. It would be interesting to compile a series of opinions—each one illustrated by a photograph—from various pictorial workers on what they would think to be the proper, correct lens-quality in a photograph made with a soft-focus lens. Perhaps eighty per cent of all who have used pictorial lenses at all would cast their votes in favor of quality such as is illustrated in Figure 1; this estimate is based upon close observation of a great many pictorial photographs and reproductions; more, perhaps, than the average critic would look at in a year. As a matter of fact, this lens-quality has come to be known as the standard in pictorial lens work, despite the fact that it is irritating and untrue to fact. Why is it done? Simply because it is the easiest, most obvious thing to do.

When we focus a sharp lens, we see to it that the rays of light which form our image come together at the plane in which our sensitive material is to be placed. If there is an error, and the negative resulting is out of focus, it is

a careless photographer, indeed, who will print it and exhibit the print without doing all he can to cover up the traces of his slipshod work.

With the soft-focus lens, however, there is a different tale to tell. Instead of a plane of critical focus, there is what we may term a plane of true softness. If the attempt to bring the plate to this position results in failure, more often than not, a virtue is made of the defect, and the prints resulting are exhibited proudly. Should there be a critic with the hardihood to point out to the photographer the error of his way, the response would probably be, "Well, it looks all right to me; I like it that way."

Of course, there are no rules by which pictorial lens-quality can be judged or measured. It is a question of feeling; but one thing we can be sure of, the phenomenon variously known as halo or halation can have no place in our pictorial photographs. Pictorial lenses, except under the most favorable conditions and unless focused with exceptional care, will produce halo, owing to the principles upon which they are designed. When I say that halo is inadmissible in a pictorial photograph, I mean the halo that asserts itself as such, and draws attention to itself by its undue prominence. A certain amount of halo is inevitable by the very nature of the lens; but this slight amount, normally invisible, must be differentiated from the ex-

cessive halo resulting from improper usage of the objective. The soft-focus lens, then, is properly used when in the prints no halo is unduly prominent.

In Figure 2 is given an example of the audacious use of the soft-focus lens to produce a definite result. The photograph was made with the rear half of a nine-inch Wollensak Verito on a 4 x 5 Standard Orthonon plate, subsequently enlarged with an anastigmat. The novel thing about it is that the camera-extension

Halo has for so long been considered an inevitable concomitant of the soft-focus lens and its work that it may be thought by many that my strictures are unnecessarily harsh. Four examples have therefore been prepared, and are given herewith; Figure 3 is made with a 12-inch Protar anastigmat, and is an example of sharp-lens work; Figure 4 is the same subject through a 12-inch Struss lens, used at full opening, F/5.5; the sunlight is rendered in a superior way, to my mind. Even at the large opening,



FIGURE 6

was increased about an inch after the correct focal plane was arrived at—the consequent halo being thereby spread out over the entire plate. Thus the usual band of light, so apparent in Figure 1, is absent, and although the halo is present, it is not perceptible even upon close examination. The result is a flattening of the contrast and the production of a reasonably high-keyed print from an ordinarily contrasted subject. Thus we conclude that the soft-focus lens may be used in any way just so long as the objectionable halo does not become actively visible. The critic is well advised to keep on the watch for halo, as it is the most common defect in pictorial lens-work. Improper focusing may be deduced when it is assertive in the print.

the definition and depth are rather good. In the original, the lettering on the perfume bottle is clearly visible. Figure 5 is made of a subject deliberately arranged to present exaggerated contrast, so that the halo can be seen, using a nine-inch Verito at full opening, correctly focused—a minimum of halo is the result. This is not to be considered as an attempt at pictorialism, but simply as an illustration of proper focusing. Compared with Figure 6 improperly focused, the difference will be seen. The lens and plate were only about 1/8 of an inch closer together for Figure 5 than for Figure 6.

A very superior kind of lens-quality is obtained without the use of a lens at all: a pin-hole on the camera-front will furnish a quality



SUNDAY AFTERNOON IN SUMMER
FIGURE 7
AUGUST KRUG



of image which will give rise to black envy in the breast of many a soft-focus lens-worker. Figure 7 is an example of pinhole work: it is a print in which the delicate gradations are fully equal to anything made with the pictorial lens; the soft, evenly-diffused definition is nowhere hard and insistent, and nowhere blurred and fuzzy. Oh, for a pinhole which would give this definition at F/4.5!

Thus we see that lens-quality is really an important item in the make-up of the pictorial photograph; proper focusing gives the finest kind of an impetus toward a successful print. Above all, the pictures should be definite; if they convey the impression of blurriness, fuzziness or unsharpness, they are not successful, no matter what lens was used to make them. This is worth the consideration of the pictorialist.

Practical Method of Developing Without a Darkroom

RAYMOND E. CROWTHER



ALTHOUGH much has already been done to "lighten our darkness" in the darkroom by the introduction of gaslight-emulsions and the study of the spectral sensitiveness of the various sensitive materials handled by the photographer—the outcome of such study being the excellent series of safe-lights which are rapidly displacing the once popular ruby glass and canary fabric of the darkroom-lamp—it cannot yet be said that the average darkroom is a place in which one would care to spend one's leisure time.

Generally, the illumination is too feeble to allow comfortable vision; the reading of labels on bottles, for example, necessitates an inspection close to the source of light and, what is perhaps worse, the dirt, which "the eye doesn't see, the heart doesn't grieve over" until an expensive negative is ruined by such "dirt." All too frequently, the trinity which holds sway in the room where development is conducted is "Darkness, Dirt and Disorder." But "Progress," the heretic who cares naught for the prerogatives of established deities, is at work, and the time is not far distant when the so-called darkroom will be the most comfortable and inviting room in a photographic establishment. Indeed, for those who care to avail themselves of the latest discoveries, one may say that the day of the really light darkroom has arrived.

It often happens that those to whom information would be of most practical value have not the time or the convenience or perhaps the ability to assimilate such information and put it to the test of practice. This unfortunate state of affairs is, of course, not confined to the particular branch of industry in which we photographers are interested; but we cannot legitimately place that fact on the credit side of our scientific balance-sheet. In a measure we are ourselves responsible for the general failure to take immediate advantage of the published results of technical re-

search of first-rate importance, for we cherish an obstinate conservatism, and are all too loth to "try out" the "new thing." Contrast this state of affairs with the national spirit of America, where the quality of "newness" is considered a merit, and one realizes at once the mainspring of the phenomenal rate of progress of the American. On the other hand, it would be unfair to accuse the young men of our profession of undue laxity, because they show but little inclination to unravel the reports on technical research which appear from time to time scattered throughout the various scientific journals and proceedings of learned societies. Unfortunately, in many cases scientists live with their heads in the clouds, and their utterances are couched in anything but lucid language, making the possession of a scientific education a necessity to the understanding of their effusions. The assistant therefore who intends to progress finds himself compelled to devote most of his leisure to irksome study. However, once the elements of chemistry, physics and mathematics have been mastered, it is amazing how easily the results of many researches can be assimilated and put into practice. For the comprehension of many researches, fortunately, no special scientific knowledge is necessary, and if the interest of chronological evolution is added in the presentation of the results the subject often becomes really fascinating.

"But what has all this got to do with the abolition of the darkroom?" may be asked. Everything; for one of the most interesting pieces of research has just led to results which enable one to have such a light in the darkroom that one may read the newspaper while developing the modern high-speed panchromatic plate in an uncovered dish.

It is a pity that the work which has led to so remarkable a result is that of a man who had not the good luck to be born an Englishman, for the circumstance that he was numbered among our



A BIT OF NATURE

J. H. FIELD

late enemies is sufficient to prejudice many minds against his conclusions, and although one cannot but excuse such prejudice to a great extent, one rejoices that the average Englishman—sport that he is—very soon appraises his opponents' achievements at their true value, and commends where praise is due just as heartily as he condemns where condemnation is due. And now having cleared the air, let us begin at the beginning, and we shall see how simple research really is.

In 1898 Mercier was granted a patent for a process of correcting overexposure-effects. The process comprised a bathing of the plate in dilute solutions of various substances, including several of the well-known developers, with subsequent drying.

This patent attracted the attention of Lüppo-Cramer, who made tests under varying conditions of the substances referred to, and in 1901 published his conclusion that the major effect of the patented process arose from desensitisation of the emulsion by the solutions employed. He found that the specified substances desensitized to different degrees, but that generally with developers of the para-amino-phenol class the destruction of the original sensitiveness was of such an order that a plate bathed in a normally constituted developing-solution could be exposed

with impunity to a light which would fog a similar plate not bathed in developer. Here the matter rested for some time while other workers were endeavoring to facilitate development in actinic light either by the addition to the developing-bath of dyes which would screen the plate from harmful light, as exemplified by the process patented by Ludwig in 1901 and that recommended by Lumière and Seyewetz in 1903, or by conversion of the silver-bromide into iodide as suggested by R. Freund in 1909, and later modified by F. F. Renwick (1920).

Interest in the desensitisation aspect of the matter was revived in 1907, when Lumière and Seyewetz confirmed Lüppo-Cramer's results, and made the observation that mere wetting of a plate with water considerably reduced its sensitiveness. Lüppo-Cramer immediately returned to the subject, and found that whereas only a very slight diminution of sensitiveness resulted from the wetting of a plate, the desensitisation caused by immersion in certain developing-solutions was quite marked with many types of emulsion, and, further, that the addition of sulphite to the developer powerfully inhibited the reduction in sensitiveness.

Continuing his work, and varying the developers and the methods of compounding their



HOME-PORTRAIT

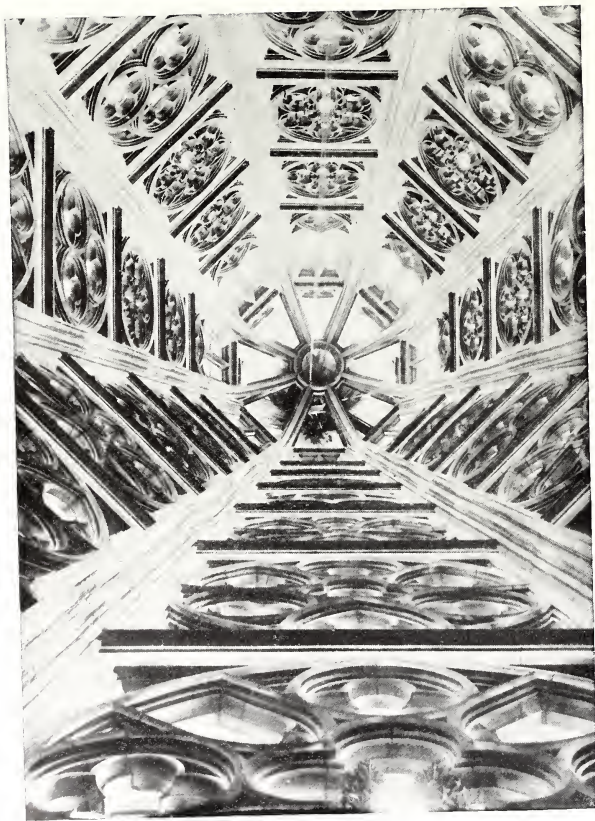
R. L. CLINE

solutions, it was found that the greatest depression of sensitiveness was caused by dilute plain water-solutions of amidol, triamino phenol, triamino benzol and triamino toluol in the form of their commercial salts—the hydrochlorides. Using a 0.05 per cent solution of these compounds, for example, it was established that the sensitiveness fell, on bathing a plate for one minute, to one two-hundredth of its original value in the case of amidol, and as low as one six-hundredth of its original value in the case of triamino toluol hydrochloride. This led at once to a practical method of developing ultra-rapid non-color sensitive plates in bright yellow light, all that was necessary being a preliminary bathing in the dark for one minute in a 1 : 2,000 solution of, let us say, triamino toluol hydrochloride. Thereafter the plate may be lifted from the solution in bright yellow light and developed by inspection in a light sufficiently powerful to fog wet, slow bromide-paper rapidly.

But in these days of the common employment of ortho', screened ortho', and panchromatic plates, the matter could not be allowed to rest at

this stage of incompleteness, and it became necessary to find a substance which would desensitise these varieties of plates and render their development by inspection a feasible proposition.

The happy spirit of co-operation which is the mark of scientific workers in every country placed at Lüppo-Cramer's disposal the range of products manufactured by the German dye-making firms, and knowing what type of substance was likely to be of service by reason of its chemical constitution, it was not long before the problem was solved. The final choice was made of the dye known as pheno-safranine, and the effectiveness of this body is such that for the development of non-color sensitive plates in a yellow light bright enough to allow of the comfortable reading of newsprint at two yards' distance from the light, it is only necessary to replace one-tenth of the water used in making up one's favorite developer with an equal volume of a 1 : 2,000 solution of the dye, and screen the plate from the light during the first half minute or so in the developer. An easier method, one which will no doubt commend itself to the English worker, and which is



WILFRED A. FRENCH

INTERIOR OF SPIRE (LOOKING UP), COLOGNE CATHEDRAL

applicable with complete success to panchromatic plates, is the following:—

In the dark the plate is immersed in a 0.05 per cent solution of the dye, and any time after one minute's immersion it may be removed therefrom in bright yellow light—or even by the light of a candle or oil-lamp at a distance of five to six feet and developed by inspection. The plate may be lifted from the developing-solution and inspected by transmitted light with impunity, a circumstance which indicates that the action of the dye is not simply that of a screen serving to cut off harmful light. As a matter of fact, one minute's immersion of a dry, fixed-out plate in the 0.05 per cent solution of the dye stains the gelatine a bluish shade of red which, when examined by the spectroscope, is found to transmit the whole visible spectrum, only partially absorbing a short section at the junction of the blue and green. The worker who develops continuously will place his plates in the dye-solution contained in a tank and remove them as he is ready to develop them, being unconcerned whether he is dealing with an ordinary, ortho', or panchromatic emulsion.

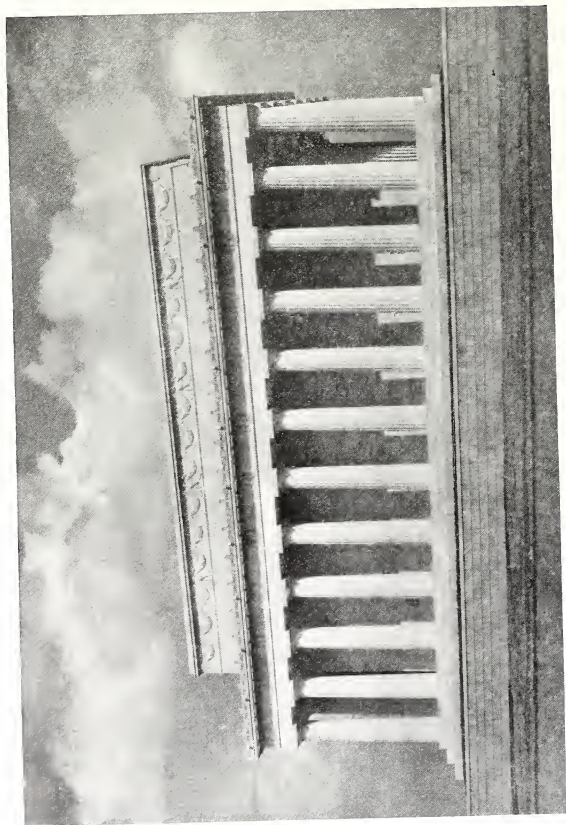
It may be objected that the darkroom is not entirely abolished and that the process offers no advantages over the method of bathing the plate in the dark before development with a dilute solution of potassium iodide, as recently recommended by F. F. Renwick; but a moment's consideration will convince one that the new process marks a real advance, for the immersion of the plate in the dye-solution necessitates only a dark cupboard or recess, and can be undertaken by the least skilled person in the workroom.

As far as comparison with the potassium-iodide process is concerned, it is only necessary to recall that, in addition to the disturbance of the density obtainable, it is necessary to remove the potassium-iodide by washing in the dark, to use special developing-solutions, and a potassium-cyanide fixing-bath, and contrast these conditions with those of the pheno-safranine process, to rate the latter at its true value. In the new process there is no disturbance of the plate's characteristics; no washing after the one-minute immersion in the dye-solution is called for; any developer may be used according to the particular fancy of the operator or the demands of the subject, and the usual hypo-bath suffices for fixing. Further, the pheno-safranine treatment considerably reduces the amount of chemical fog frequently encountered on panchromatic plates and should receive the photographer's attention.

In one respect it is unfortunate that the most powerful descensitiser so far discovered happens to be a dye which, by virtue of its chemical con-

stitution, tenaciously stains the gelatine. Somewhat prolonged washing in running water is necessary for its complete removal. This is not an uncompensated drawback, however, for one can be certain that when the film is washed free of dye it is also free of hypo. In cases where prolonged washing with water is inconvenient, there are two methods available for hastening the operation. The first is to treat the developed, fixed and approximately hypo-free plate with a bath made by mixing equal volumes of a 2 per cent alum-solution and a 5 per cent hydrochloric-acid solution. The latter solution can be readily prepared by diluting one volume of the commercial acid with six volumes of water. The action of this bath depends upon the decomposition of the gelatine-dye complex by the acid, the strength of which is sufficient to act adversely on the gelatine unless the latter is protected—hence the use of the alum. Two or three two-minute changes of this bath allows the removal of the dye by short subsequent washing. The second method of shortening the wash is the treatment of the hypo-free plate with a dilute solution of nitrous acid, whereby the dye is converted into a bluish-violet compound which possesses but little affinity for the gelatine. The nitrous acid-solution is conveniently prepared by dissolving five grains of sodium nitrite in two ounces of water and adding thereto ten minims of commercial hydrochloric acid. A four- or five-minutes' treatment with this bath should allow a colorless film to be obtained after five minutes' subsequent washing. In the writer's experience, the removal of the dye by simple water-washing is preferable to either of the "short-cut" methods, and of these latter he prefers the acid-alum treatment.

The dye with which Lüppo-Cramer carried out his research was the chemically pure product, and the writer has confirmed all his conclusions when using a sample of the same substance. This product in its pure form is not, however, an article of commerce, but the writer believes that a well-known firm of plate-makers is about to place on the market a dye which exhibits all the desirable characteristics of pure pheno-safranine. Further experiments are being made by the writer, details of which, together with an account of some remarkable actions of the dye-impregnated plates on developers, must be held over for a further communication. In the meantime it may be noted that the process is not protected by any patent, and since the staining of the film in no way interferes with inspection of the developing-image—the suppression of tendency to fog actually facilitates critical observation—it is to be anticipated that the process will rapidly become popular.—*The British Journal*.



CARL KATTELMANN

LINCOLN MEMORIAL—REAR VIEW



EDITORIAL



Reversing the Definition

IN picturing an outdoor figure, camerists sometimes make the fatal mistake of lessening its importance by defining it less sharply than the setting. This is not done intentionally, but is due either to careless focusing or to miscalculation of the distance from the camera to the figure. A more common cause is when, in photographing a rapidly moving figure or object at close range, the shutter is set at too low a speed, and thus cannot arrest the motion. In our recent competition, with winter-sports as the theme, there were several entries in which the fault under present consideration was very noticeable. We remember particularly an interesting picture of an expert skater performing the feat of rotating on one foot, at a distance of about fifteen feet from the camera. The figure of the skater was slightly blurred, whereas the group of spectators, standing about fifteen feet farther away, was well defined. As the accompanying data disclosed an exposure of one one-hundred and fiftieth of a second, it would seem that the shutter-speed was inadequate in the circumstances. One half of this exposure, together with a larger stop, would undoubtedly have yielded a better result—the center of interest clearly defined and the onlookers in the background sufficiently distinct; yet showing two differentiating planes—presenting the main figure slightly in relief—and affording a superior pictorial effect.

Another frequent cause of unsharpness is the prolonged exposure sometimes made necessary when making indoor-genres. Here, the principal figure is made to hold a pose while engaged in some activity, daylight being the only source of illumination. This particular feature was quite noticeable in a number of entries in our February competition. In one case, the queen of the culinary department was standing near the sink, and in front of a window, peeling potatoes. The exposure given was five seconds, during which time the head of the figure had visibly moved. This was the only ill-defined feature in the entire picture. Another theme was a woman engaged in knitting. Here, again, the inclined head of the model dropped a fraction of an inch—during an exposure of several seconds—causing a blurring effect, whereas the rest of the figure and the entire setting were

quite distinct. In a well-arranged interior of a smithy, the blacksmith, who was at the anvil, halted for a while with his head slightly bent forward. Here the exposure was *twenty* seconds. Of course, the poor man was not able to keep perfectly steady, consequently his head had a blurred appearance; but his body, his right hand firmly grasping the hammer resting on the anvil, and every object in the shop—including the large window, fifteen feet away—were sharply defined. In all these and similar cases, this unsharpness could have been avoided and the picture saved, if flashlight had been employed.

Picturesque Pilgrim-Pageants

THE tercentenary of the first landing of the Pilgrims on Cape Cod, November 11 (old style), 1620, was celebrated last year at Provincetown, Cape Cod. The celebration of the permanent landing—at Plymouth, across Massachusetts Bay from Provincetown—a month later, was postponed from last year on account of the cold weather which prevails in that locality in December. It will be observed in a fitting manner during the summer-months of this year, although on December 21 (new style), 1920, appropriate indoor-exercises were held. The more elaborate ceremonies are to take place out of doors, having been postponed on account of the weather. A fitting and impressive pageant has been written for the occasion by Professor George P. Baker, of Harvard University, and will be performed at Plymouth, out of doors, in groups of four days each, as follows: July 13, 14, 15 and 16; July 30, August 1, 2 and 3; and August 10, 11, 12 and 13.

The enterprise will be financed by the State of Massachusetts, and will be under the direct management of the Pilgrim Tercentenary Commission. Preparations on a large scale for this unique and artistic spectacle are now being made, and it is expected that camerists will be as numerous and active as the actors in this historic pageant. Photographers living at a distance, who desire to help perpetuate the beautiful and picturesque scenes of this unique spectacle, and need hotel-accommodations, may obtain assistance by consulting the Editors of PHOTO-ERA MAGAZINE as soon as possible.



ADVANCED COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.

Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface are not suitable for reproduction, and should be accompanied by smooth prints on P. O. P., or developing-paper having the same gradations and detail. All prints should be mounted on stiff boards.

3. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.**

4. **Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. **Be sure to state on the back of every print exactly for what competition it is intended.****

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Home-Portraits Closed February 28, 1921

First Prize: Alice G. Baumann.
Second Prize: Millie Hoops.
Third Prize: Herbert J. Harper.

Honorable Mention: Berelia S. Austin, Daniel Broderick, Wilson D. Carey, F. H. Chant, R. L. Cline, Frederick C. Davis, Maude Lee Eldridge, Karl Fichtner, Harry Footner, Alice F. Foster, W. E. Fowler, Jared A. Gardner, George M. Gerhard, G. W. Gould, Charles T. Graves, A. R. Hazard, Roy H. Heiser, Arthur T. Henrici, J. Kirkland Hodges, Howard P. Hodgman, J. T. Johnston, August Krug, W. Little, William Ludlum, Alexander Murray, Louis R. Murray, Ozan K. Nunome, Charles H. Partington, John T. Roberts, F. H. Rogers, Charles Ruddi, Peter W. Saul, J. Herbert Saunders, Kenneth D. Smith, Mabel A. Stewart, Alfred S. Upton, Samuel P. Ward, Chester M. Whitney, Leopold Zwarg.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.
"Home-Portraits." Closes February 28.
"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)
"Home-Scenes" (Interior). Closes April 30.
"Street-Scenes." Closes May 31.
"Summer-Sports." Closes June 30.
"Summer-Flowers." Closes July 31.
"Marines." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Architectural Subjects." Closes October 31.
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.

Competitors Should Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know?

This is often the reason why careless entrants wonder what has become of their prints. Let them be more careful in the future. We will do our part, gladly.

We are eager to make these competitions of practical value and benefit to every entrant. However, to serve each one to the best of our ability, we must have the necessary information. By following the rules, the advanced worker or the beginner will derive greater benefit from participation in these competitions and will enable us to be of greater service.

"Shore Scenes" Changed to "Marines"

WE have received a number of requests from subscribers and contributors to our competitions to change the competition "Shore-Scenes" to "Marines." Inasmuch as the general subject of "Marines" may be said to include "Shore-Scenes," we have decided to make the change and ask contributors to bear this in mind when sending pictures for the August, 1921, competition.



ON THE PORCH

ALICE G. BAUMANN

FIRST PRIZE—HOME-PORTRAITS

Our Mistaken Contributing Critics

My dear Mr. French: I have not so far taken any part in the print-criticism with your "Contributing Critics," but I am sufficiently aroused this month to feel it necessary to send in a criticism of the critics. The picture criticised in the March number is a delightful bit of Colorado scenery. I did not read the statement concerning it until just now; but when it was first published, I recognised immediately that it was somewhere in "our mountains," for it is so true in its effects of light and shade, atmosphere and sky. Coming at this time of year, it awakens keenly the desire to get back to these great mountains of the main range and see whether I can have any better success than formerly in an attempt to represent their magnificence by the inadequate means of photography. In these circumstances, criticism implying that Mr. Dyer's picture is not true to nature arouses my resentment.

From a pictorial point of view, the print referred to suffers from the division of interest mentioned by the

critics, and the composition could probably be improved somewhat by following the suggestions of Mr. William S. Davis; nevertheless, it represents the scene truthfully. The dark shadows on the sun-lit road are absolutely correct, the dark trunks of the aspen-trees (not birch) with the line of light on one side are just right. The distant mountain and sky are exactly as they should be except that, in the actual scene, the blue sky was probably darker, the snow-fields brighter, and the mountain-form *more distinct* than it has been represented. The white line on the edge of the mountain may possibly have been put in with pencil; but, if so, it has been done very skilfully, and is an effect that I have seen frequently. The cloud-shadows on the mountain may have been much darker in reality than in the picture. The reproduction in the January number is somewhat darker and stronger than in the March number (at least in my copy) and, in this respect, is more true to nature, although the more delicate print may be more pleasing to eastern people.

The writer of the "winning criticism" is the only one who shows any appreciation of the fact that a Colorado



ROBERT HENRY

MILLIE HOOPS

scene is different in these respects from New England or California. It is not a matter of longitude but is simply due to the fact that we are a thousand miles from the sea. If the photographer should make his picture taken in the Rocky Mountain National Park look like an eastern scene, he would be misrepresenting the country.

I fail to see why haze should be considered absolutely essential to the production of a picture, however essential it may be to some particular picture. It seems to me that the wonderfully brilliant clearness of distant mountains might be utilised to produce a fine pictorial effect, if some real artist should undertake to do it and should give as much careful study to the matter as has been given to the production of hazy pictures.

I want to make a plea for truthfulness in landscape-work. A picture is supposed to represent the artist's impression of the scene—not necessarily true in all details, but true to this impression, and I do not believe that the artist's impression of a scene in Colorado will be the same as an eastern landscape.

We have in the center of our own country a region as distinctly different from the eastern mountains as if it were some foreign land—a region filled with wonderful beauty waiting to be interpreted by artists and

poets. There are ideas and emotions aroused by scenes in these great mountains—particularly the region above timber-line—that have not yet been represented successfully in any picture, either photograph or painting; but I have been told by painters that a high-altitude landscape, which is true to nature, cannot be sold to eastern people because they do not understand it and they will not believe that it is true.

This high country is familiar to members of the Colorado Mountain Club and is visited by a few travelers each year, but is beyond the reach of the average tourist, and the mass of the people do not know of its existence. This attitude of mind which refuses to believe any part of the country different from the part that they know is largely responsible for this ignorance on the part of the general public.

If the artist-photographer would visit the high mountains with the idea of interpreting this wonderful country as it is, with an humble desire to feel its true spirit and to get something of this spirit into his pictures, and not to imitate the ideals developed in the lowlands, we might have some really great mountain-pictures.

KENNETH HARTLEY.

COLORADO SPRINGS, COLO.



RUTH

HERBERT J. HARPER

Reproductions of Autochromes

A VALUED subscriber has sent the Editor a copy of a well-known English illustrated weekly which contains a series of reproductions of autochromes of the Grand Canyon of Arizona made by an American photographer. Our candid opinion is asked, and we do not hesitate to give it. These printed reproductions are presumably facsimiles of the original autochromes but, apparently, the utmost skill was not exercised in the process of reproducing them. The publishers of the English weekly may declare to the contrary, for the photographic reproductions in this popular publication are usually of the finest quality and workmanship. As to the autochrome originals, all we can say is that they are examples of wretched photography—in focusing and composition. This is not surprising, for their author is virtually unknown in America as a photographer, and the name does not appear in the catalogs or lists of any of the numerous photographic exhibitions held in America.

As to facsimile reproductions of autochromes of the Grand Canyon of Arizona, we are reliably informed that a prominent American illustrated monthly magazine will publish, at an early date, a large number of reproductions of Fred Payne Clatworthy's autochromes

of the Grand Canyon of Arizona, which, as mentioned in April PHOTO-ERA MAGAZINE, are simply superb, in every respect, and are highly creditable to Mr. Clatworthy's rare artistic skill as a photographer and an autochromist. As for their promised reproductions, they are likely to be eminently satisfactory, for the publishers lack neither the skill nor the necessary funds to ensure the finest possible result.

He Has Said It!

"I HAVE given all photo-magazines of this country and England the once over, and I can say that PHOTO-ERA MAGAZINE is the best of all."

H. E. ADAMS.



A Sudden Change of Expression

It was in the drawing-class at the school. "Sargent was a great artist," said the teacher. "With one stroke he could change a smiling face into a sorrowful one." "That ain't nothin'," piped up Johnny. "Me mother does that to me lots of times."

Exchange.



SUBJECT FOR NEXT COMPETITION
ADVANCED WORKERS



THE AQUAPLANE GIRL

PAUL M. ELDER

**Advanced Competition—Summer-Sports
Closes June 30, 1921**

ALTHOUGH experienced workers know that photography may be enjoyed throughout the year, the fact remains that most camerists confine their picture-making to the summer-months. In great measure, this is due to lack of time or opportunity during other months of the year. Without a doubt, June, July, August and September are the months in which camera-

work is at its height. Weather-conditions and vacations are contributing factors; and even those who cannot leave the city, have an opportunity to get out of doors with a camera.

There is so much subject-material, everywhere, during the summer-months, that it is very difficult to decide what part of it to select for a competition. After careful consideration, we decided that "Summer-Sports" would appeal to our friends and that it would be a welcome change. That there are many clever

makers of sport-pictures was shown convincingly in the "Winter-Sports" Competition which brought to light many excellent photographs from new workers. We see no reason why these same contributors, and many others, should not be able to do as well, or better, in the present competition.

It should be remembered that the camerist has everything in his favor during the summer-months. The actinic value of light is at its best, he may go about in physical comfort and his subject-material is not hard to find. Although a reflecting-camera is to be preferred, it should not be assumed that pictures of summer-sports cannot well be made with other types of cameras. A few moments spent in reading the instruction-book, or a good book on general photography, or one devoted to the question of exposure, will reveal that even a box-form camera may be used under favorable conditions. Of course, to photograph a baseball in flight or a speed-boat tearing through the water is too much to expect of a moderate-priced equipment; but then, a game of croquet or other "quiet" sport will be as acceptable to the jury, provided that the picture possesses technical and artistic merit. However, most folding hand-cameras are equipped with shutters that are of sufficient speed to enable the camerist to make pictures of virtually all summer-sports. Even in cases where the great speed of the subject might deter the worker from making the exposure, there is usually a viewpoint from which to obtain a picture that will not show motion.

Vest-pocket cameras are very effective in making pictures of summer-sports. They are small, light and fitted with lens-and-shutter equipments that will enable the camerist to "stop" all but the very fastest subject. A distinct advantage of the vest-pocket outfit is its portability, and, for that very reason, it is more apt to be "taken along" to be used when occasion offers. The heavy, cumbersome tripod-outfit is out of place and more likely to be injured than to make a picture. A camera that may be manipulated quickly, that is reasonably well-equipped with a lens-and-shutter combination and that may be carried easily, is the outfit to use, if possible.

In this competition, as in all competitions, the worker must seize the psychological moment when the subject is at its best, to press the shutter-release. Certain forms of summer-sports are difficult to photograph, and the camerist will be compelled to think and to act quickly. For example, let us suppose that we are watching a motor-boat race. One of the boats is rounding the first buoy in a sparkling flash of leaping spray and foam-flecked wake. Is this the psychological moment? Perhaps, it would be better to wait to photograph this same boat as she spurts down the home stretch, and to victory. To my mind, the burden rests squarely upon the shoulders of the camerist to make the right selection. It depends upon the thought that the worker aims to portray. If he intends merely to record a speeding motor-boat, that is one thing; but if he wishes to combine a picture of the boat with the excitement of a close finish in the race, that is another matter. The same thing might be said with regard to a number of other summer-sports, such as base-ball, track-meets, polo, swimming, tennis, yacht-racing, auto-racing and the ever-popular horse-race.

However, although some summer-sport pictures will come under the general heading of speed-pictures, yet, the camerist should remember that the jury is not interested in a speed-picture unless it tells a story convincingly about a summer-sport. In short, no matter how fine a speed-picture the camerist might

send in, it will not be accepted simply because it is an excellent photograph. It must depict a summer-sport, first; and, then, the factor of speed may become apparent, but of secondary importance only.

In considering the subject of this competition, the worker should not conclude that sport-pictures must be confined to races and games. A moment's reflection will reveal many summer-activities which may be included in this competition. For example: canoeing, hiking, fishing, clam-digging, picking flowers, bird-study, hunting butterflies, camping, tether-ball, croquet, ring-toss, quoits and a number of other pastimes that vacationists might devise. True, these may not be sports in the commonly accepted sense; but they are eligible under the general heading of summer activities that involve the element of sport. In short, we wish to make this competition broad enough to reflect, pictorially, in artistic compositions, the life and pleasures of the summer-season.

The camerist must needs be governed by circumstances and by environment. Obviously, if he lives in the middle west, many miles from a large body of water, he cannot make pictures of a motor-boat race. However, there are summer-sports in his part of the country that will be welcomed by the jury just as heartily as though the maker lived on the Atlantic seaboard. In this connection, it might be pointed out that there may be sports in remote corners of our large country that some of us never heard of before. Any worker who can send us a picture of this sort and combine with it the requirements of good technique and composition will be making a valuable contribution to this competition.

Let me say just a word with regard to an unfortunate tendency among many vacationists. There is no denying the appeal that new friends and acquaintances make, as we meet them during our vacations at the seashore or in the mountains; but, in most cases, in a few months, the appeal has spent its force and, instead of an interesting pictorial record of our travels, we have but a collection of persons that we soon forget and mean nothing photographically. Mind you, I am not discouraging the making of pictures of the family and of friends; but I do wish to call attention to the wasted opportunities to make pictures of places that we visit so that years afterward we may turn the leaves of the photo-album with pleasure and profit.

One amateur of my acquaintance, and an excellent photographer, returned from a trip to Yellowstone Park. I asked him to show me the pictures that he made of that wonderful region. He did so, and to my amazement and regret I found that virtually every picture included a group. Even when he made a photograph of Old Faithful, the famous geyser, he was possessed to include five persons in such a manner as to partly obscure the geyser as its mighty stream shot up into the air. In short, his Yellowstone Park trip netted him, photographically, a series of group-pictures with the marvels of this remarkable region always in the background. The persons that composed these groups may die or be forgotten and then, what has my friend left? Had he confined his skill to photographing the natural wonders of the park, he would possess a beautiful collection of pictures that would be a pleasure to him and to his friends as long as he lived and to others after his death.

In every competition, let each worker determine to make a picture that will live; that will carry an appeal to the beholder so long as the paper upon which it is printed holds together. The best is none too good in photography.

A. H. B.



BEGINNERS' COMPETITION



Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.

Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given *Honorable Mention*.

Subject for each contest is "*Miscellaneous*"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two years'** practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data. Criticism at request.*

6. Prints receiving prizes or *Honorable Mention* become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. **Be sure to state on the back of every print for what contest it is intended.**

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition

Closed February 28, 1921

First Prize: None awarded.

Second Prize: Roberto R. Moya.

Honorable Mention: John J. Griffiths, Anton Berest, Roger B. Hernandez, M. Toyoda, Paul H. M. Vanderbilt, James B. Warner.

The Beginner and His Vacation

It is not too early for the beginner to give some thought to his photographic vacation. I am assuming that he is eager to devote his summer-vacation to photographic work; not to the exclusion of other pleasures, but rather as an aid to enjoy these the more. Of course, in many cases, the beginner will be unable to determine where and when he may go; but there are some who have it in their power to decide whether the vacation-days shall be spent at the seashore or in the mountains. Whenever it is possible to do so, a part of the country should be selected that will enable the beginner to find ample pictorial material at his disposal.

In all probability, the greatest difficulty will be that of too many subjects; and the beginner will attempt each and every one with indifferent success. If he has no especial preference, he should begin with the determination to master one subject at a time.

On the other hand, if he *knows* that he prefers marines to landscapes, he should not waste precious time in the attempt to make pictures of a subject that is of no real interest to him. However, every beginner should make up his mind at the outset to know something of the general classifications of pictures so that if he should be called upon to make a marine, landscape, outdoor-portrait, speed-picture or group, he could do so with credit to himself. It should be remembered that no one can become a specialist until he knows enough about his subject to determine which branch of it he likes the best.

Perhaps, a true story of a beginner of my acquaintance will make my point clear. Last summer, the friend in question decided that he would make his vacation-days count heavily in his photographic experience. He chose a summer-resort on the Maine coast which combined the advantages of the sea and the woods. He stated to me that he was in the position of Kipling's "The Ship that Found Herself." That is, he was "new" and his camera was new and he had not met the open sea of practical photographic experience. Moreover, he was not sure of his photographic strength when the test might come. To train himself to meet all manner of technical conditions of wind and weather, my friend arranged a course of procedure that would be sure to involve him, sooner or later, in every photographic storm in the calendar. He stipulated on his schedule that he must make a certain number of pictures every day, rain or shine; that he must separate these required exposures into landscapes, marines, portraits, groups and speed-pictures; that he must do his own developing and printing; and that he should receive no assistance of any kind. This



MY RED CANOE

ROBERTO R. MOYA

plan was carried out to the letter over a period of one month; and, when this beginner returned from his vacation, he "had found himself" photographically. Because of his determination and desire to be successful, he got more out of photography and more out of life in general. Undoubtedly, some of his pictures will appear in photographic exhibitions in a very few months. He *knows* what he can do and he is able to determine accurately the branch of photography in which he desires to specialise and in which he will do his best work.

Of course, there is the beginner who, from the moment that the new camera is in his hands, knows exactly what he wishes to do and *does it*; but I am afraid that he is the exception and not the rule. In nearly every case, there seems to be a period of "finding oneself" photographically. It is to make this experience as short and profitable as possible that I suggest the advisability to spend the vacation-days where the beginner may have every opportunity to determine his own photographic future. The greater the variety of subject-material, the better.

The beginner will do well to join a camera-club, if one is available, and to go on all photographic outings. This suggestion is of special value to those who may have neither the time nor the opportunity to leave the city during the summer-months. It is a pleasure to call attention to the rejuvenation of the camera-clubs in every part of the United States and Canada. There is a determination in all quarters to welcome the beginner and to help him to photographic success.

Too much emphasis cannot be placed on the practical value of doing one's own photo-finishing. Tank-development by daylight has removed the

strongest objection to doing the work; and, in fact, it is a welcome change in the daily life at a summer-resort or camp. A roll of film exposed during the day may be developed in the evening and, thus, an immediate opportunity is given the beginner to note the relation between exposure and the resulting negative. Moreover, he is not kept in doubt with regard to his work. Within a few hours he can discover his mistakes and avoid them the next day. Often, to wait a week or ten days would result disastrously if a serious blunder were being made in manipulating the camera. In short, if the beginner does his own developing and printing, he can balance his books, photographically, at the end of the day's "business."

In conclusion, let me assure the beginner that these suggestions are based upon practical experience; and that, if he will follow them out, in whole or in part, he will make rapid progress and enjoy the experience. It is very far from drudgery to the person who is really serious and eager to make good pictures. As I have said many times, it is better not to make the attempt at all than to "dabble" in photography with no credit to oneself. It requires a very little extra thought and effort to make *good pictures*. Is it not worth while?

A. H. B.

Notice to Beginners

THE pages of PHOTO-ERA MAGAZINE contain helpful articles on pictorial photography and on technique—written not only by the Editor in his department, "Our Illustrations," but by others throughout each issue of the magazine. There are also very instructive



NATURE'S MIRROR JAMES B. WARNER

articles from the pens of such experts as W. S. Davis, Frederick C. Davis, Winn W. Davidson and others. Most of our advanced workers show by the improvement of their work—as exhibited in these pages—that they read our words and advice conscientiously and profitably. Unfortunately, there are some who neglect to read PHOTO-ERA MAGAZINE carefully and, by the constantly recurring faults in their pictures, indicate that they do not profit by the advice that PHOTO-ERA MAGAZINE offers, from month to month. From now on, no pictures will be considered eligible in these competitions, that show continued ignorance of the rules of composition referred to in these pages, particularly in the department, "Our Illustrations." That department is written for the special benefit of those whose work is faulty or capable of improvement. There are certain contributors in the Beginners' Department whose entries, from month to month, show no visible improvement in matters that are being constantly pointed out by the Editors, such as children dressed in glaring white and photographed in the brilliant sun—producing an effect at once harsh, disagreeable and martistic, besides being bad technically; an outdoor-group with each member looking directly into the camera, and with mouths open as well; outdoor-genres with background playing a bewildering jazz-tune; single outdoor-figures posed against a distracting background of fence-rails or trellis, etc.; a view of water and shore in contrasting tones without detail or gradations.

For these reasons, the entries in the February com-

petition, although numerous, were not considered favorably by the Jury, and, consequently, no first prize was awarded. The participants in the Beginners' Competition will receive little profit or encouragement if prizes are awarded according to merit, when the merit happens to be of a low standard. Hereafter, the verdict will not be, "Which of these two pictures is the less objectionable," but "Which of these two has the more merit;" for a picture that has very little merit—although by comparison the best of the entire lot of entries in this competition—will be ignored, even if it means that no prizes at all shall be awarded. This competition is conducted with a view to benefit its participants whose efforts are not on so high a plane as that of the advanced workers, but where, nevertheless, real merit is shown. Therefore, participants in the Beginners' Competition should make it their business to read PHOTO-ERA MAGAZINE carefully and seek to apply its words of counsel and advice.

Participants ought to have sufficient intelligence to know whether or not they have been successful in producing pictures of at least a fair degree of merit; otherwise the pictures must not be entered in this competition. If sent, they will only be returned—even without a word of comment—provided, of course, the necessary return-postage has been sent. It must be evident to such workers that to submit prints without real merit means a useless expenditure of time, money and effort.

W. A. F.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Printing-Efficiency: Developing Bromide- and Gaslight-Prints

"WHAT is the best developer for Bromide- and Gaslight-prints?" There is no doubt that it is the one recommended by the *makers* of the particular paper used, as they, knowing the exact nature of the emulsion, are able by careful experiments to arrive at a developing-formula that will bring out the best qualities of the paper.

Either M.Q. or Amidol may be used with equal success, and we append our own formula with instructions for mixing. The only alterations that should ever be made are, when necessary, to dilute the developer, and to increase the proportion of potassium bromide. A well-restrained *dilute* developer gives fine warm-black colors on the soft grade gaslight, and a well-restrained *normal* strength developer is the one most suitable for developing Bromide-prints to that greenish color which gives such nice sepias in the hypo-alum toning-bath. In both these cases the exposure must be on the full side, but printers should bear in mind that (excepting in special cases) correct exposure followed by full development (i.e. development carried on until the image ceases to gain in depth) produces pure black images of fine quality especially suitable for Sulphide toning. No useful purpose can be served by unduly prolonging development, indeed it may introduce fog, but the practised printer will know by experience when to stop development. Generally speaking, a Bromide-print should be fully developed in two minutes, and a gaslight-print (excepting the soft grade) in one minute. The time of appearance of the image is not a reliable guide, as it varies so much according to the quality of the negative used, and the temperature of the developer.

There is one chemical in the developers that calls for special mention, and that is sodium sulphite. It is not a good plan to make up a stock-solution of this in bulk (as many Amidol-users do) and keep it any length of time as it deteriorates in solution. We therefore advise freshly made sulphite solution for all developers. In order to obtain blue-black images on gaslight paper, some workers reduce the proportion of potassium bromide; but we do not recommend that less than ten grains be used in twenty ounces of developer.

Meto-Hydrokinone Developer

(Double Strength)

Meto	16 grains or	2 grammes.
Hydrokinone	60 " "	7 " "
Sodium sulphite cryst.	1 oz.	55 "
Sodium carbonate cryst.	1 " "	55 "
Potassium bromide	20 grains	2 "
Water to make	20 ozs.	1 litre.

In about fifteen ounces of warm water dissolve the Meto, then add the hydrokinone and sulphite, and when dissolved add the carbonate and bromide. Make up to twenty ounces with cold water and bottle off in full, well-corked bottles.

For Bromides, add equal volume of water; for gaslight-prints use full strength for the vigorous and normal grades, but diluted for the soft grade.

Amidol Developer

Sodium sulphite	1½ ozs.	or	60 grammes.
Amidol	50 grs.	"	5 "
Potassium bromide	10 grs.	"	1 "
Water to make	20 ozs.	"	1 litre.

In about eighteen ounces of tepid water dissolve the sulphite, then add the Amidol and Bromide, make up to twenty ounces and use within three days. Dilute only when developing prints on the soft-grade gaslight-paper.

Rajar, Ltd.

Focusing in Enlarging

WHEN making enlargements, it is easiest to focus with the lens wide open; for then the image on the easel will appear as brilliantly illuminated as is possible, says a writer in *Kodakery*.

If the sharpest enlargement that the negative can yield is desired, a sheet of white paper, of about the same thickness as the bromide paper on which the enlargement is to be made, should be placed on the easel and the image focused on this. When the image appears sharp the bromide paper is substituted for the white paper and the exposure made with the lens stopped down to F/16. For the sharpest obtainable results, glossy or smooth bromide paper must be used, as rough-surface paper does not render sharp lines wholly sharp.

This method, of focusing as nearly as possible on the exact plane where the emulsion-side of the bromide paper will lie and making the exposure with the lens stopped down, is often used for making small enlargements; those, for instance, that are not larger than 5 x 7; but for larger pictures such sharp focusing is rarely employed unless the negative from which the enlargement is to be made is not sharp.

When enlargements are to be made from unsharp negatives—some of which make large pictures that are very attractive—a good way to focus is to place a sharp negative in the enlarging-camera and focus this on the easel. After the focus has been obtained this negative is removed and the one from which the picture is to be made is put in its place.

After having made many enlargements, of various sizes, the writer prefers to focus directly on the easel, without making any allowance for the thickness of the bromide paper, and to make the exposure through the largest lens-stop. The resulting pictures are not quite as sharp as those obtained by the method described above, but the effects are generally considered more pleasing, especially when the pictures are viewed, as large pictures should be, at a distance of a few feet. A picture that is framed and hung on the wall must, in order to be effective, convey its message briefly, without elaboration of detail. In an impressive picture, as in a well-told story, minute detail is sacrificed so that the attention will be centered on the point of interest.

Those who prefer the pictorial *suggestion* conveyed by blended lines and masses of light and shade, to the pictorial *explanation* conveyed by minutely sharp lines and fine detail, can easily produce such effects from sharp as well as from unsharp negatives.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

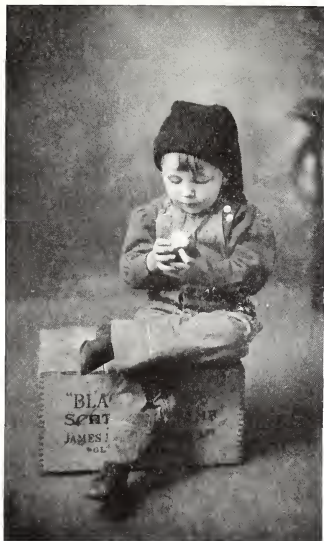
A CHARMING little fellow, but too obviously posed. The rather delightfully imitative mature position is belied by the complacent disinterestedness in the expression of the face, and by the very babyish spreading of the tiny fingers as they hold the indistinguishable object. It is regrettable that the occupation of the youngster is not in such complete harmony with his mode of dress as is the box on which he sits. By the way; isn't he a trifle too near the right edge of the box for comfort? In this picture, a definite background that would give atmosphere to the composition could have been used to decided advantage. As it stands, the background would greatly be improved by the removal of that beginning of a shadow at the extreme right. Both that and the dark shadow further down the print simply *will* catch and hold the eye.

Y. BILLY RUBIN.

ALTHOUGH the general arrangement of the subject of the picture offered for criticism is very pleasing, the background and the sitter do not seem to be in harmony. The child was too evidently posed for the occasion, as shown by a slight stiffness and prominence of the right hand and the awkward crossing of the left leg, which seems hardly natural for a youngster so engaged. Had a smaller box and one without unsightly lettering been used, the effect and balance would have been better. Trimming the shadow from the right side and about half an inch from the top would bring the principal point of interest into a stronger position. I believe that slightly more foreground would be an improvement, though care should be taken to avoid the light-struck edge and corner shown here. The tones are good with the exception of that of the two buttons on the left shoulder which are too light.

JOHN C. CLEMENT.

IN many respects, especially in the lighting, the picture is good. There is a decided incongruity between the subject and the background, which looks like one used in studios for portrait-work. If this is a



THE PICTURE CRITICISED THIS MONTH

portrait, the costume, posture and seat are inappropriate; if it is not a portrait, the background should harmonise better with the "back-yardy" effect produced by the overalls and box. The pose, especially of the legs, lacks in spontaneity, and I am sure that the little fellow fell to his left just after the exposure was made. His evident interest in what he holds drew my eyes to the object of his gaze, and I was disappointed not to be able to make out exactly what it was. The effect would have been more pleasing, had the operator called him and exposed the negative during the resultant momentary upward glance.

FRANK P. SMART.

The Razor-Hone and Photography

THOSE readers of PHOTO-ERA MAGAZINE who shave themselves with the old-fashioned razor, may profit from the following suggestions. At certain seasons of the year, and in dry regions where there is much dust in the air, great difficulty is often experienced in keeping a proper cutting-edge on the razor. Fine particles of silicious matter get into the beard and, if not washed out very carefully, quickly turn the edge of the razor.

A leather-strop is not sufficient for restoring the lost edge, and it is necessary to use a stone much oftener than the irate shaver may suspect. My preference is still for the old Swaty stone. As it is sufficiently soft for the purpose, it soon wears smooth and is without effect on the razor. By grinding the surface on powdered emery, the stone is soon rendered as good as new;

and here the photographic part of the operation comes in.

We have all heard that by grinding two sheets of glass together with emery-powder between them, we can quickly secure two pieces of finely-ground glass at a minimum of expense. I have found that there are often slight inequalities in the thickness of the glass which detract seriously from the quickness of the operation—in fact, I prefer to buy my glass already ground.

But the smooth Swaty stone must be roughened, so I sprinkle some emery-powder on a sheet of glass and proceed to grind with the razor-stone. Regardless of the speed of the operation, I get *one* sheet of ground-glass absolutely without extra effort.

The glass will not be finished at one operation, but can be saved over till the stone needs roughening again. The partly-ground glass makes a satisfactory substitute for grained zinc in developing carbon-prints. The prints do not slide around on it so easily as they do on plain glass.

WINN W. DAVIDSON.

Our Mistaken Contributing Critics

WE wish to call the attention of Our Contributing Critics to a letter from Kenneth Hartley elsewhere in this issue. It is a letter which it will be well to read carefully because it is written by a practical photographer and one well-known to readers of PHOTO-ERA MAGAZINE.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



Our Illustrations

THE Pittsburgh Salon is to be sincerely congratulated in having so capable an artist, critic and writer, as John Paul Edwards, furnish a review of its eighth annual display. The readers of this magazine are equally favored. The Editor, as well as our readers and Mr. Edwards, himself, regrets that not more space could be allotted to the reviewer's analysis of the pictures of this highly creditable exhibition, also that the bromoils of Dr. Chaffee, Mr. Kales and Mr. Archer, as halftoned, do not appear to better advantage. They were reproduced from copies of the original prints courteously supplied by President Reiter. It was the best that could be done in the circumstances. In the absence of illustrations, prints of a number of other well-known exhibitors had to be omitted, such as Messrs. Macnaughtan, Pratt, Weston, Fleckenstein, Tausig, Kilmer, Ruzicka, Dickson, Wierum, Frittita, Mettee, Neeson, Reiter and Mrs. Cassidy—mentioned favorably by Mr. Edwards. Fine representative examples of their work have appeared in PHOTO-ERA MAGAZINE during the past few years, and can be easily looked up by our readers who are regular subscribers.

The editorial choice of "Summer-Breezes" to adorn the front-cover this month—see also page 229—undoubtedly will be generally approved, especially as Mr. Edwards considers it "a charming, simple landscape—simple in conception, beautifully executed—is one outstanding picture of the salon." The Editor endorses his opinion of this superb figure in landscape, as well as of the other salon-pictures that decorate the pages of this issue. Data for pictures on pages 220 to 229 are as follow:

"Frayne Williams"; Studio; October, 3 P.M.; north light; 8 x 10 Seneca View-Camera; 14½-inch Wollensak Verito; stop, F/8; 3 seconds; Eastman Portrait Film; Metol-Hydrokinone; Palladiotype.

"Le Puy, Haute Loire"; September; 3¼ x 4¼ Adams Minex; 5½-inch Ross Zeiss Tessar; stop, F/4.5; Seed Ortho; M. Q. Tank; Barnet White Ordinary; bromoil-process.

"Wexford Village"; Wexford, Pa., May, 10 A.M.; hazy sunlight; 3¼ x 4¼ Seneca; rapid rectilinear lens; stop, F/8; K1 color-screen; ½ second; Orthothion Plate; M. Q.; Azo copy from Bromoil original.

"Draped Study"; In Ruth St. Denis Studio, Los Angeles; October, 3 P.M.; good light; 3¼ x 4¼ Sanderson; 7-inch Wollensak Verito; stop, F/5.6; 1/5 second, Standard Polychrome; pyro-acetone, tray; gun image over Rough Illingworth Bromide.

The Editor is glad that Mr. William S. Davis selected so hackneyed a subject to illustrate his article as appears on page 231. It shows how it can be saved by artistic treatment. Yet, despite his demonstration of a method to obtain from the original negative a print of eminently poetic and atmospheric quality, there undoubtedly will be many readers who prefer the original, straight print, page 231, to the "finished product," page 233—and vice versa. The Editor's personal choice? It is the improved print.

The Editorial policy of this magazine is that writers for its pages on any photographic topic must be practi-

cal workers of recognised photographic ability. This was stipulated in the case of Mr. August Krug, who first appeared as a photographic writer in PHOTO-ERA MAGAZINE several years ago; and not until the publication, in this issue, of Part Five of his instructive series of articles, "Fundamentals of Print-Criticism and Appreciation"—begun in January, 1921—did specimens of his photographic skill appear in these pages. See pages 237, 238 and 242.

Not for some time have PHOTO-ERA readers been favored with examples of J. H. Field's poetically charming work. "A Bit of Nature," page 244, is a welcome reminder of the time

"When Spring unlocks the flowers
To paint the laughing soil."

After the picture-lover has sufficiently admired this delightful scene, he should turn his attention to the pictorial design—of the much-used diagonal form—and note how simple, after all, and how spontaneous, is Mr. Field's real bit of nature. Note, too, the gently inclining lines of the objects at the left and the right of the picture, and the deftly created balance of light and dark, and the resultant unity which is a distinguishing feature of this well-ordered composition.

Although R. L. Cline's picture of the little lady, page 245, has not the ear-marks of a home-portrait, it was accorded Honorable Mention in the home-portraits competition, February, this year. It appealed to the jury by its artistic arrangement, the child's natural and pleasing expression and the generally excellent craftsmanship. Data: At home in dining-room; October, 1920; bright; 3¼ x 5½ Compact Graflex; 7-inch Wollensak Velostigmat Series II F/4.5; stop, F/4.5; 1/10 second; Hammer Ortho; tank-developed with pyro; printed on Azo E double weight; developed with Elon Hydro.

High and higher the Editor ascended one of the twin-towers of the Cologne Cathedral, in April, 1903, until he reached the base of the sculptured Gothic spire and it was "Verboten" to go any farther. Looking up towards the apex of the long, converging lines of open-tracery work, I experienced a thrill of wonder at this achievement of man's handiwork, while below, boomed the giant Kaiserglocke (emperor's bell) which, according to reports circulated in this country during the Great War, was taken down and, on account of its bronze, was utilised by the Germans for the making of cannon. But the incident never happened. Deciding to prepare a memento of the unusual view looking upwards, I opened my folding Kodak, placed it on its back and, in a few seconds, had secured a perpetual souvenir. The eventual result was not only a technically fairly good picture, but it has served to recall to my mind the thrilling sensation I had in one of the world's few great masterpieces of Gothic architecture. Data: April 28, 1903; forenoon; good light; 5 x 7 Folding Cartridge Kodak; 7-inch Voigtlander No. 3a, series III, Collinear; stop, F/18; exposure, 6 seconds; Eastman N. C. Film; pyro; P. M. C. Bromide enlargement.

It was because the United States felt the need of a man as chief executive of the type of Abraham Lincoln,

that the name of America's great and martyred president was mentioned so frequently during the recent World War. But many loyal Americans were much disturbed when they saw his portrait placed side by side with that of Woodrow Wilson, and grew enthusiastic over the erection of the Lincoln Memorial—that massive, dignified and inspiring structure completed recently in Potomac Park at the nation's capital. The photograph by Carl Kattelmann, made in that worker's happiest vein, is admirable in its setting of a picturesque sky, and, in feeling, suggests his superb picture of Mount Vernon, published in February 1916 PHOTO-ERA. Data: October; storm approaching from northeast; 8 x 10 Eastman View Camera; Wollensak Velostigmat lens; Eastman Commercial Ortho Film; color-screen; no exposure stated.

Advanced Workers' Competition

THE results in the "Home-Portraits" competition were uneven in comprehension and quality. True, a more difficult task could not be assigned to PHOTO-ERA workers. That must be clear to any one who appreciates the difficulties with regard to the management of setting, illumination and general technique. In some instances, the home-accessories were too numerous and obtrusive, whereas in others the authors' signed declaration was the only evidence that the portraits had been made in the home. Two entries of the latter kind were accepted and honored by the jury. They were Millie Hoops' portrait of a little boy and Mr. Cline's portrait of a little girl.

The first prize was awarded to a gum-print by Alice G. Baumann, the portrait having been made on what appears to be a porch, at Lucerne, Switzerland. (The photographer lives with her parents at their permanent home in Switzerland.) The portrait, with its semi-outdoor setting, is superb. Page 251. Everything, even to the expression of the sitter, has been managed with exceeding skill, harmony and taste. There is not a harsh note, not an intruding accessory; and the vine, which serves to diffuse and soften the light, is a valuable adjunct in its subdued appearance.

The handsome portrait of a boy ("Robert Henry"), page 252, made a hit with the jury. Small wonder! The child was posed in the sun-parlor of the home, the windows were judiciously screened, resulting in a remarkably pleasing illumination that yielded a fine plastic effect. The head appears, therefore, as a round object, instead of a flat one so commonly represented. How well the dark tie supports the mass of dark hair! A light-colored one would have produced an unhappy opposite effect. The student in portraiture will please observe, moreover, that these prize-winners have placed the sitter so that ample space remains at the side towards which the face is slightly turned, and not directly in the middle of the picture-space as is sometimes done in the above-mentioned circumstances. Data: February; bright cloudy; 3A Special Kodak; Zeiss-Kodak lens with portrait lens and Wolfe Artistic lens attached; made at two feet and eight inches; stop, F/8; one second; Eastman roll-film; tank; Azol; enlarged on Wellington B. B.

The portrait made convincingly within the home is by Herbert J. Harper, page 253. The plants behind and at each side of the sitter may appear as objectionable accessories to some of our critical readers; but they are needed to impart the necessary home-character to the portrait. They constitute convincing proofs of the performance. Placed, as they are, against the lighted windows, they produce a slightly

disturbing effect, it is true; but the little girl is so substantially portrayed, and conspicuously placed, that she manages to hold the center of the stage. Although she is photographed against the light (*contre-jour*) the result is pleasing, natural and plastic. Data: February, 3 p.m.; bright; 5 x 7 Seneca N. I. View; 8 1/4-inch Wollensak Velostigmat Series II; stop, F/4.5; one second; Eastman's Portrait Film; Monomet-Hydro; enlarged on Artura Carbon Black, Extra Heavy.

Beginners' Competition

THE picture of a man propelling a canoe, by Mr. Moya, is a really meritorious performance; but it so happens that the printed halftone, as shown on page 257, shows pleasing opposites of light and dark, whereas the original print is disagreeably contrasty. The principal object is placed judiciously in an attractive setting of stream and receding banks. Even so, a wee bit could be spared from the lower edge of the picture without detriment. Data: Licking River, Ky.; July, 4.30 p.m.; bright sunlight; 9 x 12 cm. Focal Plane Nettel; 6-inch Steinheil lens; stop, F/6.3; 1/60 of a second; Eastman Panchromatic plate; pyro, tank; contact Azo print.

James B. Warner's effort offers good material for a better picture than is shown on page 258. As has been expressed many times in this department, and elsewhere, a perfect reflection is extremely artistic, and should be avoided rather than sought. Let it be diffused or rendered indistinct by taking advantage of a slight breeze which ruffles the surface of the water. There are other times when the reflection is less sharply defined than in Mr. Warner's "Nature's Mirror," which is also too compressed and too crowded. It seems as if a horizontal view of this scene would yield a more pleasing result. With the bridge, however, below the center of the picture-space, the disagreeable black mass in the lower-right corner would be excluded. Perhaps, too, a different light would aid in another effort by Mr. Warner to utilize this promising camera-material. Data: Golden Gate Park, San Francisco, Calif.; January, 4 p.m.; bright sun; 3A (3 1/4 x 5 1/2) Kodak; 6-inch Goerz Series III lens; stop, F/16; one second; Eastman roll-film; Metol-Quinol; Azo.

Example of Interpretation

THE "Aeroplane-Girl," by Paul M. Elder, page 254, illustrates a sport practiced in the summer-time, although only good swimmers, with the requisite skill and daring, are suited to this form of physical exercise. The picture is well spaced and, like the girl on the plank, exceedingly well balanced. The athletic young girl displays daring and grace in her performance, and her muscular and developed figure is strikingly relieved against the foaming waters. Mr. Elder did his part admirably. Data: June afternoon; intense sunlight; I-A Speed Kodak; Zeiss-Kodak lens; 5-inch focus; Eastman N. C. Film; the model is being towed at the rate of thirty miles an hour.



Our Contributing Critics

Our assistant critics will find it difficult to pick flaws with C. R. Dyer's striking view in the Canadian Rockies. Faults it may have; but they are so cleverly screened that, as they say, he may "get away with it."



ON THE GROUNDGLASS

WILFRED A. FRENCH



The Story of a Duplicate Print

AN incident in which figured the late William H. Rau, commercial photographer of Philadelphia and a Boston expert, may prove interesting to PHOTO-ERA readers. About ten years ago, Mr. X., the owner of a large and beautiful estate in Dover, not many miles from Boston, sent for Mr. Rau to make pictures of his summer-residence, at Dover—his horses, cows, sheep and dogs; also the most striking interiors, and the works of art—oil-paintings and statuary. It was a large order, requiring as it did over one gross of eight by ten dryplates, and three weeks of constant work. The plates were developed at Mr. Rau's establishment, in Philadelphia, where also the prints were made.

At the completion of this great task—during the month of July—which engaged Mr. Rau's famous technical ability, Mr. X. expressed his utmost satisfaction and delight, and sent the photographer a cheque, which, Mr. Rau told me, amounted to over one thousand dollars. To show his patron that he was not only a skilled technician, but a photographer with a soul, Mr. Rau, a month later, made a picture of a lovely scene on the estate—a flock of sheep grazing on the slope of a hill, late in the afternoon, with a pine-grove in the background. From the negative he made a contact transparency, and from the latter an enlarged negative, fourteen by seventeen. A contact-print on a high-grade platinum paper yielded a print of startling beauty, which, suitably framed, Mr. Rau presented to Mr. X. as a mark of appreciation. The recipient was so delighted with the subject and the artistic character of the picture, that he requested Mr. Rau to make at once six duplicates, similarly framed. These Mr. X. distributed among his friends, who appreciated them sufficiently to hang them in a conspicuous place in their homes. To make the gift more valuable, Mr. X. requested that the original negative, the transparency, and the enlarged negative be broken up. This was promptly and thoroughly done by Mr. Rau, personally.

Not long afterwards, Mr. Y.,—a neighbor of Mr. X.—returned from Europe, and during his first call noticed and admired Mr. Rau's pictorial masterpiece. Could he procure a copy? "Sorry; but that is out of the question," replied Mr. X., who explained that the negatives no longer existed. "Then," remarked Mr. Y.,—who was a camerist of no mean skill—"I shall make my own, provided you have no objection, Mr. X." A spirited discussion followed, Mr. X. believing firmly that Mr. Rau's pictorial and technical skill could not be matched by his neighbor, and the latter having faith in his own ability to duplicate the picture, somehow. "Besides," remarked Mr. X., "that beautiful oak at the right of the picture was shattered by lightning only a few days ago." "That will make no difference," replied Mr. Y. "Faking can do things you may not be familiar with." To be brief, the discussion ended in a wager, made by Mr. X., that the thing could not be done. Mr. Y. accepted the challenge, but requested and obtained *carte blanche* in the entire affair.

Two weeks had gone by, when Mr. X. was invited by Mr. Y. to call and see his duplicated picture of Mr. Rau's pictorial achievement, the apple of Mr. X.'s eye. Words fail to describe his astonishment, his wonder,

as he gazed upon the exact counterpart—picture, size, and frame. Hurriedly he telephoned to his wife to have the butler take his picture off the wall and bring it over. When the two pictures were placed side by side, Mr. X. could not tell them apart, even to the tone and texture of the prints. Here was a mystery, indeed!

Having won the wager and, what was more, a perfect copy of the picture he so much admired, Mr. Y. consented to explain, which he did as follows. He had tried vainly to create a pictorial theme similar to Mr. Rau's. He had even succeeded in coaxing the sheep into a similar pleasing group; but why pursue a method that failed to bring him even near the goal? Abandoning it, he decided to resort to strategy. He knew that one of his neighbors, Mr. A., was the proud owner of one of the six pictures Mr. X. had so generously distributed, and persuaded him to let him have the use of it for a few days, as he wanted to show it to a number of personal friends whom he had invited to dinner the following day. These friends were well-known pictorialists of Greater Boston, and had produced salon-pictures in various printing-processes. After the repast, the gentlemen retired into the smoking-room, where between *chateaux* and *perfectos* the picture—displayed on an easel—was admired and discussed, in conjunction with the subject uppermost in Mr. Y.'s mind—how to produce an exact duplicate, even as to size.

Of course, the only logical way was to have some skilful photographer copy it; that was the opinion of those present. But who among the photo-specialists of Greater Boston was to be entrusted with this difficult piece of work? Opinion varied, and to such an extent, that poor Mr. Y. was in doubt whom to select of the experts recommended. He thanked them, one and all, but withheld his final decision. The morning following the conference, Mr. Y. motored to Boston and called upon—well, whom do you suppose? The Editor.

Mr. Y. put the question straight to the scribe who, without hesitation, recommended F. A. Sanderson, of Bromfield Street. And Mr. Sanderson was engaged to do the work. Subsequent events proved the wisdom of the Editor's choice.

A Literal Interpretation

WHEN the great collection of paintings by Roerich was being exhibited at the Boston Art Club, not long ago, a certain visitor—disappointed with this new and to him incomprehensible style of painting—was not slow to give vent to his feelings. "I call this an abominable show!" he exclaimed, for he had no powers of artistic perception. "There's nothing in any of these queer-looking daubs. No sense, no beauty, no nothing," he continued. A member of the club, who had been carefully studying the pictures for over an hour, took exception to the uncomplimentary remarks of the visitor and said to him, "You are wrong, my friend. Take the picture of that old castle you have just turned away from with scorn. If you do not understand the picture, you should try to find out what's behind it." The visitor took the hint, approached the picture and, turning it a little, looked behind it. Then, facing the club-member, he remarked, "I don't see anything there." "And you never will," replied the other, turning away with a gesture of despair.



ANSWERS TO QUERIES



C. K. O.—Moonlight-effects are usually made by photographing into the setting sun and underexposing. Better and more artistic effects may be obtained if the sun is partly obscured by clouds or trees. The sheen of the sun on the water should not be too dazzling or the result will be a confused array of white dots that may spoil an otherwise artistic picture. A rising sun may be used advantageously where conditions will permit, especially at the seashore. The use of a ray-filter is of advantage to emphasise the cloud-formations and to eliminate some of the too dazzling sheen of the water. However, if careful attention be given to the use of the diaphragm-stop and shutter-speed, beautiful effects may be had without the use of a ray-filter. There is always an artistic appeal about a good "moonlight" picture, and the making of one is a delight to the ambitious camerist. Few branches of photography offer a better opportunity to obtain original and striking effects.

F. D. F.—To remove dust from plates, when filling plateholders, use a *broad camel-hair brush*; or a wad of clean absorbent cotton. The brush should always be kept clear of dust and, when not in use, in a place where dust cannot reach it. Beware of overseas' advice to use the fleshy part of the hand! Think of what a clammy hand, a hot hand, a soiled hand, a gritty hand or a perspiring hand would do to the dry smooth surface of the sensitised dryplate!

D. S. W.—A simple fixing-bath is made and used as follows: Hypo being very soluble it can be kept in a concentrated solution and diluted as required, not only saving time of waiting for crystals to dissolve when wanted immediately, but enabling one to regulate the temperature of the bath by diluting with hot- or ice-water, according to the time of year. For a stock-solution, dissolve each pound of hypo in about a pint and a half of warm water, then add enough water to bring the bulk up to a quart. For use, dilute with equal parts of water.

Should an acid fixing-bath be wanted, add to each pint of hypo a drachm of potassium meta-bisulphite, previously dissolved in a small amount of cool water, or an equivalent amount of acid-bisulphite can be employed. With most plates and papers, alum is not needed, except in very hot weather; but when required, dissolve one drachm of chrome alum in an ounce of water, and add the last thing to a pint of bath.

D. A. C.—A good cleaning-fluid is very necessary in the photo-laboratory. Many chemical deposits are difficult to remove from trays and graduates by simple rinsing, yet it is essential to keep such utensils clean to avoid loss through contamination causing spots and stains. The following fluid will very quickly remove most stains or chemical deposits from trays, bottles, etc., the article needing only to be rinsed with clear water after the fluid has done its work.

Make up a saturated solution of potassium bichromate (which will be about 1 to 10 in strength) and to this add *slowly* about one-tenth its bulk of common sulphuric acid, the exact proportions not being important so long as a strongly acid solution of bichromate is produced. This can be used repeatedly until it ceases to act.

S. A. R.—Prints from thin negatives that shall not be flat and monotonous can be produced by using a weak and slow light in printing. Professional printers generally place their printing-frames (containing weak negatives covered by a sheet of ground-glass or tissue-paper to weaken still further the action of the light) *in the shade*. If placed in the direct sun together with negatives of normal density, the weak negative permits the light-rays to act too quickly—thus producing flat prints. The developing-solution can be bromided slightly to help produce the necessary contrast. Of course, the new contrast-papers, now on the market, also help considerably, and their use may be found the best means to obtain satisfactory prints. A weak negative will not yield a snappy bromide enlargement, unless skill be exercised in the printing and development, and in the choice of the most suitable printing-paper.

F. A. A.—Coloring bromide prints in pastel is a process easy of accomplishment, provided a suitable bromide print for the purpose may be had. Any one practiced in drawing will find it easy to apply the pastel in any color to the print, which should be on a mat or semi-mat surface. The success or beauty of the result will depend entirely upon the skill of the worker. Many prefer this method of coloring or tinting a photographic print, to applying watercolors. After the pastel-color has been applied to the print, it may be modified and transformed into smooth tones, with the aid of the finger-tip or a leather or paper stump, and beautiful results may thus be obtained. The finished print should then be fixed, which is done by holding it over the steam arising from boiling water.

S. B. A.—The advantage of a reflecting-camera lies in the fact that the image of the subject appears on the groundglass right-side up until the shutter is released. No focusing-cloth or tripod is required to compose each picture properly and to the best advantage. There are many excellent reflecting-cameras now on the market. Some foreign instruments fold into small compass and may be carried as easily as a small hand-camera. Most reflecting-cameras are equipped with focal-plane shutters and are used extensively to make speed-pictures. However, these cameras are equally well-adapted to all forms of amateur and professional photography. Owing to the remarkable efficiency of the focal-plane shutter, the use of an anastigmat lens is virtually required to obtain satisfactory results. All reflecting-cameras are listed with high-grade lens-equipments. The selection of the lens depends on speed, focus and cost, and rests entirely with the individual camerist and his requirements.

F. S. D.—The word "Hobby" is derived from "Hobby-horse," *i.e.*, a wooden-horse on rockers or springs—a toy for children to ride. More often it is a horse's head made of wood, provided with a bridle attached to a long, wooden stick to be used as a toy bestridden by the youngster. The word has long been used to designate a favorite pursuit or pastime or hobby. Thus we have such hobbies as collecting postage-stamps, butterflies, insects, or stuffed-birds; but the most popular and attractive of all hobbies is the practice of amateur-photography.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions
and Conventions are solicited for publication



Announcement

BEGINNING with the July issue, 1921, we shall publish a series of articles entitled, "My First Photograph." Each article will consist of a reproduction of the very first photograph, together with its history, made by a prominent American amateur photographer. As this may cause a little embarrassment to the author of the photograph, and of the accompanying story with all its interesting details, the Editor of PHOTO-ERA MAGAZINE will start the ball rolling by initiating this series of photographic experiences by presenting, in the forthcoming July issue, his very first photographic attempt—an outdoor group—and narrate, briefly, the hopes, feelings and impressions associated with this, his first attempt to use a camera. It is hoped that this example of personal courage on the part of the Editor will induce others to disclose the secrets of their first venture in photography. PHOTO-ERA readers can then compare these first attempts with the authors' achievements of to-day and, doubtless, will exclaim in terms commensurate with their feelings, "Great Scott! what a difference!"

The B. Y. M. C. U. Camera Club Annual Show

THE members' annual exhibit of the Boston Young Men's Christian Union Camera Club, this year, was one of the best ever held in the history of this growing and enterprising organization. It was the general opinion that the exhibition, held in the Union Hall, April 4 to April 16, this year, was one of the best displays of pictorial photography with which Greater Boston has been favored for many years. The Union Camera Club certainly deserves high praise for the great strides its members have made in artistic spirit and technical proficiency.

The forty members contributed a total of two hundred and sixty-three prints, which, for the benefit of the Jury, were first shown arranged in classes, consisting of landscapes, portraits, genres, marines and miscellaneous. Immediately after the verdict was rendered, the prints were re-arranged as individual exhibits. The following prizes were awarded.

Landscapes, first prize (Blue Ribbon), Gustav H. Seelig, No. 184, "Descriptive Winter"; second prize (Red Ribbon), Raymond E. Hanson, No. 120, "Evening on the Shawsheen."

Portraits, first prize (B. R.), Louis Astrella, No. 32, "Mr. Kiley"; second prize (R. R.), M. L. Vincent, No. 232, "Portrait."

Genres, first prize (B. R.), Henry Eichheim, No. 65, "Hunchow"; second prize (R. R.), Ralph Osborne, No. 159, "The Dance."

Marines, first prize (B. R.), A. H. Manson, No. 145, "Bug-Eye"; second prize (R. R.), Ralph Osborne, No. 158, "Gloucester Fishermen."

Miscellaneous, first prize (B. R.), Henry Shaw, No. 194, "Brewer-Fountain at Night" (Boston Common); second prize (R. R.), Herbert B. Turner, No. 226, "Le Puy."

Honorable Mentions were awarded as follows: Harold E. Almy, one; Louis Astrella, four; R. A.

Brewer, one; W. E. Buswell, three; A. S. Dockham, one; Henry Eichheim, two; Victor D. Elmore, three; Chester Grillo, one; Arthur Hammond, one; Raymond E. Hanson, two; E. C. Howard, one; Ralph Osborne, five; Osborne R. Perry, two; Joseph A. Riley, one; Gustav H. Seelig, five; Henry Shaw, three; Herbert B. Turner, six; Paul Waitt, one; Charles G. Wells, one.

The gold star for the outstanding picture of the highest merit was awarded to Henry Eichheim for his blue-ribbon picture, "Hunchow."

The judges of the exhibit were Wilfred A. French, Ph.D., managing-editor of PHOTO-ERA MAGAZINE; Theodore M. Dillaway, landscape-painter and Instructor in Art in the Public Schools of Boston; F. A. Sanderson, photographic expert.

The Committee on the exhibit were Harold E. Almy, chairman; Raymond E. Hanson, William J. Jaycock.

The officers of the Camera Club are Herbert Bryant Turner, president; Louis Astrella, vice-president; C. F. Dodge, treasurer, and Ernest W. Gustavsen, secretary.

Pilgrim Pageants at Plymouth

THIRTY Passamaquoddy Indians, including William Neptune, their former governor, have been selected to set up the Indian village at Plymouth, Massachusetts, which is to be a feature of the Pilgrim tercentenary celebration next July and August.

They will take along their wigwams, birch-bark canoes, costumes and war-implements, and will manufacture baskets, give war- and peace-dances and take part in pageants. This will be interesting news to camera visitors who may have but a slight personal acquaintance with the descendants of the original Americans. What a rare treat these Plymouth pageants will be to photographers!

Mr. Wentworth's Annual Show

MR. BERTRAND H. WENTWORTH's annual exhibition of prints in Boston, U.S.A., is always eagerly anticipated by members of the Society of Arts and Crafts and by photographers generally. This year, from March 18 to 31, he showed thirty-four new subjects, most of them typical beauty-spots off the coast of Maine. They were in his usual artistic vein, which was characterized by sympathetic interpretation and clear and refined artistry. To quote W. H. Downes, the art-editor of the *Boston Transcript*, "All of Mr. Wentworth's work bears unmistakable evidence of his taste, unerring instinct for pictorial composition, and skill in execution. He is a master craftsman." Mr. Wentworth is a member of the Society of Arts and Crafts and has received the Society's bronze medal for excellence of work.

On April 1 Mr. Wentworth concluded his Boston visit by showing a series of motion-pictures of marine-subjects and stereopticon-views in Bates Hall, Y.M.C.A. The subjects were rolling surf at the Island of Monhegan, pictures of fog, fishermen cleaning fish and the activities of the muskrat-trapper. He also read a personally written sketch on springtime which evinced his deep fondness of nature in her various moods and his mastery of the English language.

Annual Show of the Portland Camera Club

THE annual exhibition of the Portland Camera Club, Photographic Section of the Portland Society of Art, was held at the L. D. M. Swett Memorial Art Museum, Portland, Maine, from March 1 to April 4, 1921. The exhibit consisted of one hundred and twenty prints contributed by forty-eight pictorialists, about one-third of whom were members of the Portland Camera Club, the rest being well-known photographers from Maine to California.

This annual event has taken its place among the important exhibitions of the country, and the standard, this year, was well maintained. Although the exhibit was somewhat smaller in size than usual, careful judging of the pictures has kept the quality high. The pictures were exceedingly well hung.

Perhaps, the most noticeable feature was the feeling which was given of a well-balanced show. Most of the photographic processes were represented, although gum, platinum and bromide predominated.

Among the groups of photographs submitted by single exhibitors, none surpassed the wonderful warm-black platinum of William E. Macnoughtan, of Brooklyn, N.Y. His landscape, "Sunshine and Shadow," had very interesting contrasts of light and shade. "The Bridge," another print by the same artist, showed excellent treatment of a rather troublesome composition.

Remick Neeson, of Baltimore, was represented by three carbon-prints—all still-life. The grouping of the subjects and their lighting were well done.

The bromoil-process was seen at its best in the print entitled "At the Turn of the Road," by William Gordon Shields, of New York.

John Paul Edwards, of Sacramento, California, had five prints, perhaps the best of which was "Golden Mists." The rendition of the planes in this picture, which was a river-scene, turned what might have been a very ordinary photograph into a work of art.

Other contributors having several prints accepted, were Vernon E. Duroe, Myers R. Jones, Holmes I. Mettee, Joseph Petrocelli, John C. Stick, Lou Sweet and Everitt Kilburn Taylor.

In conclusion, the work of some of the members of the Portland Camera Club might be specially mentioned. Dr. Lovejoy contributed five prints, three gums and two bromides, of his usual high standard. "The Fens—Moonlight" was, perhaps, the best; although, as an example of aerial and downhill perspective, "Knife Edge—Mt. Adams" attracted much favorable comment.

Francis Orville Libby had several excellent architectural studies which proved that he does not need to confine himself to landscape-work.

Apparently, the only ozobrome in the exhibition was contributed by E. Roy Monroe. This picture, "Where the Cold Wind Sweeps," demonstrated that all the delicate tones of carbon may be rendered by this process.

Alfred Brinkler had four interesting mountain-studies—all gums; J. Ludger Rainville a pleasing snow-scene; and H. A. Latimer was at his best in his print entitled, "Seining on the Seine."

H. A. P.

The Organization of a Camera Club

THE EDITORS of PHOTO-ERA MAGAZINE have written many letters in reply to the question, "How can I organize a camera club in my town?" In connection with this important question we are pleased to refer our readers to a new booklet, "The Camera Club, Its Organization and Management" by Louis F. Bucher, secretary of the Associated Camera Clubs of America.

Mr. Bucher is well known to readers of PHOTO-ERA MAGAZINE through his illustrated articles and prize-winning pictures.

A writer in *Kodakery* refers to Mr. Bucher and to his valuable brochure in the following interesting manner: "In this booklet he tells you why you should have a camera club, how to begin one, how to organize it and how to make it a success. There are just twenty-four pages brimful of precisely the information that you need on the subject. The book is published and distributed by the Associated Camera Clubs of America."

"Mr. Bucher is an enthusiastic cameraman and his enthusiasm is very contagious. He believes in camera clubs because he believes that two heads are better than one and that in the mutual exchange of ideas and in the pooling of their mutual problems, amateurs can be of great help to each other. It's lonesome working alone with no other help than a text-book and no other source of inspiration than the photographic journal. At least, that is Mr. Bucher's gospel and he gives mighty good reasons for the faith that is in him."

From a long and pleasant acquaintance with Mr. Bucher and his work, we know that the suggestions which he offers are sound and based upon practical experience. In short, we are convinced that every reader who is considering seriously the forming of a camera club should obtain a copy. The booklet is well written and well printed and may be had, free of charge, by writing to The Associated Camera Clubs of America, 878 Broad Street, Newark, New Jersey.

Toronto Camera Club's Annual Salon

WE are requested to announce that the Toronto Camera Club will hold its Thirtieth Annual Salon from August 27 to September 10, 1921. The exhibition is international in character, and will be held in the Graphic Arts Building at the Canadian National Exhibition.

Any photo-pictorialists interested to participate in this usually interesting exhibition, are asked to communicate with the Secretary, J. R. Lawson, 2 Gould Street, Toronto, Canada, and receive from him an entry-blank which gives all necessary information.

Frederick & Nelson's Second Exhibition

ANNOUNCEMENT has just been made that the dates for the Second Annual Exhibition of Pictorial Photography to be held next fall in the Frederick & Nelson Auditorium, Seattle, Washington, have been set for November 1 to 12 inclusive.

This competitive exhibition was inaugurated last fall, there being 1,100 entries, from more than forty states, and Canada and several foreign countries were represented. Last year, the competition was limited to the work of amateurs; but this year the restriction has been removed and an invitation extended to all pictorial photographers, whatever their status and wherever situated, to send in their prints.

There are no separate classifications in this competition, portraits, studies in still-life, landscapes—all types—entering on an equal basis; the only restriction being that hand-colored photographs are barred. The board of judges will be selected from among the most prominent photographers and painters in the Northwest. The prizes offered are: First prize \$100; second prize \$75; third prize \$50; five prizes of \$10 each and ten prizes of \$5 each.

Thousands of visitors inspected the exhibit last year, it being free to the public. The first prize was

awarded to a photograph entered from Brooklyn, New York; but several entries from the West ranked high among the prize-winners.

The object of the exhibition is to encourage the cultivation of photographic art in the Northwest, by offering photographers of the Northwest an opportunity to show their work in competition and to give them a chance to compare their own productions with the best work of other parts of the world.

Color-Photography for Snapshots

A SECRET emulsion, invented by a Russian professor, which, it is asserted, will make color-photography possible for everybody, is about to be introduced into this country, says the *London Times*. The problem of making the process capable of snapshot-exposures as well as time-work is claimed to have been overcome, and the exposure can be as rapid as with the ordinary emulsion, thus fitting the invention for motion-picture work also.

Special cameras and plates will be on the market shortly, and the cost of a colored film is expected to be only fifteen to twenty per cent higher than the ordinary black and white type.

An Application of Photography to Education

EDITOR OF PHOTO-ERA MAGAZINE:

As a result of a record-keeping plan adopted by Amos C. Henry, city-superintendent of Jeffersonville, Indiana, schools, all pupils have had their photographs made and filed away for future reference. Making the pupils' photographs, at least once every two years, will constitute a valuable and comprehensive record of each individual child as far as character-development is concerned, Mr. Henry states. He further says that although photographs have been made of pupils both in the grades and high school, those of the younger children are regarded as more valuable in supplying a basis for later comparison. The work was done free of charge to the school-children; but the photographer is selling the pictures individually.

BOB WILLS BERLIN.

Undesirable Advertisements

Among the advertisements declined emphatically as undesirable, by the Editor of PHOTO-ERA MAGAZINE, is one—from an individual who offers to teach motion-picture photography in less than five weeks! It is possible for him to do so; but the knowledge imparted in so short a time, might not be worth the effort, time and money expended by the pupil. It might serve as a diversion; or there might be a certain element of interest associated with this brief term of tuition to make it worth while. At any rate, PHOTO-ERA readers are spared the disappointment that would result from a trial of this alluring but questionable offer.

A Plethora of Pictures

GOETHE said that we ought to gaze at a picture every day. For our part, we have complied faithfully and willingly; sometimes with reluctance—every day a picture, or rather PICTURES! To be sure, photography was not practiced in Goethe's day, Daguerré's discovery occurring seven years after the poet's death. But pictures are pictures, be they oil-paintings, etchings or photographs. So there!

A Damage-Proof Container for Pictures

To say the least, it is very discouraging to open packages of beautiful pictures to find them badly bent or cracked despite careful packing. Apparently, it matters little whether the package comes by mail or express; in either event, the pictures are often ruined. Therefore, it was with pleasure and interest that we received, in perfect condition, two excellent pictures from Helmut Kroening of St. Paul, Minnesota, to be entered in the "Copying Works of Art" competition which closed March 31.

It appears that Mr. Kroening has suffered long and silently at the hands of the parcel post and the express companies; but, at last, he could bear it no longer and he devised a container for pictures that seems to be proof against the worst that the post-office or express companies can do.

Briefly, Mr. Kroening's container has a heavy board—a trifle larger than the picture—as a base upon which to place the print. Next, a piece of sheet-tin is cut so that it folds over and overlaps in such a manner that the board upon which the picture rests is covered on all four sides by sheet-tin which is tacked down with small tacks on the back of the board. Mr. Kroening added one refinement which was very much appreciated by the Editor. On the back of the package was fastened a small, flat screw-driver which bore the legend, "Pry open with this." Thus, not only did the pictures arrive in perfect condition but the means to open the package was provided with rare courtesy and skill.

President Harding at Pilgrim-Tercentenary

AN important feature of the Tercentenary celebrations of the landing of the Pilgrims at Plymouth, in 1620, will be the presence on August 1, this year, of President Harding, together with Senator Lodge and Secretary Weeks. They will arrive at the town of Plymouth, Mass., on the Presidential Yacht, the "Mayflower," accompanied by a naval escort.

August 1 will be the big day of the Plymouth celebrations and its success as an attraction will be assured by the presence of President Harding and other notables. It marks an anniversary of the day when the Pilgrims sailed from Delfthaven on their quest of religious freedom, and the most elaborate of all the pageants to be given at Plymouth this summer, which will constitute features of the festivities, will be presented on that day. This should be remembered by all the camerists who are planning to visit Plymouth, Mass., this summer.

Watch for this Impostor!

HE is about five feet, seven inches tall, blond, has blue eyes, combs his hair back to cover a bald spot. Wore mustache when last heard from and, in one instance at least, gave his name as A. Erickson. He seems to be operating in the West, calling on photographers with a hard-luck story. He claims to be secretary of a Western Photographers' Association, or a California Photographers' Association. Neither one of these associations is in existence. He seems to be acquainted with the photographers and tells a smooth story, with the result that he has collected considerable money from his victims. Investigation discloses him to be an impostor and that he has worked the same scheme on a large number of photographers throughout Nebraska, Iowa, Kansas, and most likely other states. Be on the lookout for him!

Abel's Photo-Weekly.



LONDON LETTER

CARINE AND WILL CADBY



ANOTHER fusion of businesses devoted to the production of a variety of photographic materials has been carried out under the title of Amalgamated Photographic Manufacturers, Ltd. It comprises the Page Prize Co., Rajar Ltd., Marion & Co., Marion & Foulger Ltd., A. Kershaw & Son Ltd., The Kershaw Optical Co. Ltd., and the Rotary Photographic Co. (1917) Ltd.

The share-capital of the combined concern is £1,100,000. Like all present-day big business-amalgamations, the object is to control the full range of products connected with the production and sale of the commodities in which the undertaking is interested. Amalgamated Photographic Manufacturers will produce sensitised papers, films, chemical preparations, plates, color-plates, mounts, frames, mouldings, cameras, reflex and other varieties, kinematograph-projectors, binoculars, scientific apparatus, photographic and kinematograph-lenses, general optical glass-work, photographic postcards, show-cards and advertising-specialties. It is stated that the vendor companies have 10,000 customers scattered throughout the world, and by a centralised organisation it is hoped to increase sales to a great extent. The present output of sensitised papers is to be doubled, so that photographers must get busy if they are to absorb the contemplated increase.

From Germany we hear of the proposed intention of an optical glass-works in Berlin to flood the world shortly with a new and very cheap camera, which will, it is asserted, give the same results as the most expensive apparatus hitherto made. But we are getting rather tired of "scare-cries" from across the Rhine—sent out very probably with not entirely disinterested motives. Anyway, we should not counsel the many users of the doubled output of film, foreshadowed by the Amalgamated Photographic Manufacturers, to wait for the materialising of these cheap and efficient cameras if they are really in need of new apparatus, although the report was circumstantial enough to mention the coming autumn as the probable date of their advent!

On all sides, we hear of big efforts to centralise and control business, and so we hopefully surmise that it will in the long run mean cheaper production, in which happy result it is only natural also to hope that the consumer will share to some extent. The householder feels, after years of high prices, that the world is beginning to right itself now that pork is really beginning to climb down from its dizzy price eminence. But so far the photographer looks in vain for any such cheering indication as to future prices in his own particular domain, and we can only hope that it will not be necessary to rely on the Teuton for the impetus that will at last provide the pig in photography!

Apparently an infallible test has been discovered for the detection of spurious "old masters," or perhaps we should rather say that by means of X-rays the age of a picture can be calculated. The painters of long ago used mineral colors which can be penetrated by the rays; but in modern work vegetable-colors are employed which are impenetrable. When a real antique is photographed the image shows clear on the plate, whereas modern paintings appear blurred and faint. It has also been found that retouches and alterations can be detected; and, indeed, sometimes a great deal

more than meets the eye on the surface of the picture.

The "Fairy Stunt" as our papers call it, is growing, and we are all becoming more and more mystified. *The Daily Express* this week published another photograph showing a child, more of the robust than the ethereal type, looking at a fairy which is dancing near her face.

Naturally, there is a good deal of scepticism among photographers about these elves who wander about Yorkshire, and appear to these two girls, and we are promised shortly a book on the subject by Sir A. Conan Doyle and Mr. E. L. Gardner, which will include as illustrations the photographs made by Miss Elsie Wright and her cousin, Miss Frances Ealing, both quite young girls.

Photographers obviously remark on the fact that the fairies can only be seen by these two girls, and many explanations have been heard, such as drawing or painting a fairy, and introducing it into the photograph. But now there is talk of a real test, and one wonders what will come of it. The fairies are to be filmed! Photographers maintain that anything with a light reflecting-surface can be photographed, and fairies have been photographed, so they must be light-reflecting. It will be immaterial if they are invisible to the operators, the camera will see, and the film record them, and if it shows real movement, the sceptics will be convinced.

So far these two girl "psychics" are the only people who have been able to obtain pictures of the fairies; but Mr. Gardner tells us that experts have declared faking is out of the question, as it would need all the appliances of an up-to-date studio to obtain such clear illusions, and that the plates used were secretly marked by himself. The photographs, he says, were made by the girls alone, and developed by them in a make-shift darkroom, and there seems no reason why these simple, unsophisticated country-girls should attempt any fraud, neither would they have the skill to carry it out. We express no opinion one way or the other; but certainly look forward to the filming of the fairies with not a little interest.

Messrs. Houghton, Ltd., who always have PHOTO-ERA MAGAZINE on sale at their retail-department in High Holborn, are advising their professional customers to meet bad times by departing from the old conventional method of pricing and selling photographs to sitters by the dozen. Why not, they say, offer three prints at a quarter of the charge usually asked for twelve? Excellent, but it seems to us this would be a real acid-test of the producer's faith in his work. If he succeeds in disposing of only the first three photographs, then surely plates, chemicals and establishment-charges would more than eat up all profit, for the dozen could be produced at nearly the same cost. But; if, on the other hand, he *knows* he has made a good and speaking likeness, he might, if he were not experienced in the ways of human nature—when having its portrait made professionally—have faith in the excellence of his work to obtain further sales.

But alas, things are not so simple and easy as this. The two "posers" generally offered by the sitter when not wishing to accept a photograph, cover all the

(Continued on next page)



BUTTONS

JOSEPHINE THOMPSON

Buttons' Bit

THE above is a story of a patriotic poodle, told by the courtesy of a very good camera operated by a clever and patient photographer, Josephine Thompson, of Boston. The little creature belongs to the variety blessed, or cursed, with a white and heavy coat of wool, of which he was deprived during the recent days of practical economy and thrift. The story is presented in the form of a pamphlet, small and artistic in appearance, its contents consisting of the story told in the form of a narrative, broken by a short poem and illustrated by a continuous series of nine photographs. These pictures are as follows:—Buttons sitting up on a chair, begging to give his wool to the Soldiers; Buttons reproduced after the clip; a large platter on which rests the once proud woolen coat that Buttons gave up; a picture of the carded wool; coatless Buttons seated by the side of his former garment; the lady of the house spinning the wool into yarn; a "moving" picture of the finished skin, weighing four and one-half ounces; the lady of the house knitting the material into a pair of socks; and, finally, the completed transformation of Buttons' once proud woolen garment into a pair of hand-made socks, size 11.

But here's the story, told by Buttons himself:—

"I'm just a little white poodle; but I feel so pleased that I just want to tell every one about it. I was born in Boston, ten years ago last February; but when I was three months old, I was sold to a gentleman in Somerville, and, as he has paid my license ever since, I feel like a real citizen. Of course, I can't talk, but I listen. I hear lots of things about dogs being useless, and the boys needing all the wool-supply, and the price of my daily boiled beef going up so. Anyway, I have wished that I could do something to help.

Last summer, one of my good neighbors, who lived on the next corner, said to my mistress that my hair felt as soft as a little lamb and she would like to spin some when I was sheared next time. So this is what happened. They trimmed me carefully, and my good friend carded and spun my coat into soft wool, and she said it was lovely. Then my mistress' sister in the West knitted the wool into a pair of socks, and I hope some Sammy will get them to wear if he needs them next winter. In a few days now, I will get sheared again, and maybe there will be enough to make a helmet or another pair of socks.

Yesterday they had my picture taken with the socks in the background, and if they are a success, maybe folks will want to buy them. Most everyone loves me for myself; but I feel just bubbling over with happiness to be able to do my 'bit."

Now, this engaging little episode was well worthy the photographic attention bestowed upon it. Let the camerist eager to do something of a like nature emulate Mrs. Thompson's example. Surely, he will find a subject worthy his skill, taste and activity. By publishing his results in the form of a tasteful, illustrated pamphlet, he will produce something of interest and value—something that can be used as a pleasing souvenir or a Christmas-gift.—EDITOR.

London Letter.

(Continued from preceding page)

ground. If the portrait is astonishingly good looking, the sitter will plead that her—yes, it is the sinning sex—friends say they would not recognise it. And if the camera-man is certain that he has a speaking likeness, she will frankly tell him she wished to be made at "her best." No, if we were professional photographers we should not be inclined to view Messrs. Houghton's scheme with enthusiasm.

The Efficiency Exhibition at Olympia, organised by the *Daily Mail*, was visited by the King and Queen, who arrived at the early hour of 9.30. While the exhibits at the *Daily Mail* stall were being explained, a photograph of the royal party was made, and before they left the Exhibition, not only were copies of this and other photographs presented to them, but also proofs of a "process" block—that is, a block ready to use for printing in the newspaper—which had taken only 23 minutes to complete on the stand. Among other wonderful things Professor Lazarus-Barlow at the Middlesex Hospital stand explained to their Majesties the micro-photographs, showing how forgeries of the penny black stamp were detected; also, microscopic slides illustrating the value of the research done in the hospital-schools.

Smuggling Severely Punished in Germany

THE Reichstag has passed a law to the effect that whoever is guilty of smuggling, or of the forbidden export of life-necessities, will, in particularly severe cases, be punished by imprisonment of one to fifteen years and with a fine of at least twenty thousand marks.

Although such strict laws with regard to smuggling do not appear to exist in this country—at least their violations are not punished so severely—one is reminded of the fact that the enforcement of laws in a former enemy country is an object-lesson to other countries, where leniency obtains above justice.



SPARE the knife and spoil the print.

A. SEAMON STER.



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



The following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the months of February and March.

William C. Motteram has been granted patent, Number 1,367,074, Tank for Developing Photographic Films.

Patent, Number 1,367,268, has been granted to Joseph Kessler, of Rochester, N.Y., for Film-Stopping Device.

Charles E. Fawkes, Dubuque, Iowa, and Chauncey W. McIntire, Farnham, N.Y., have been issued patent, Number 1,368,029, for Autographic Film-Pack.

Photographic Diaphragm, patent, Number 1,368,608, to Richard L. Curran, West Caldwell, N.J.

Patent, Number 1,368,614, Autographic Camera. Donald M. Dey, Syracuse, N.Y.

Camera Matting-Frame, patent, Number 1,368,761, Erich G. Schlegel, New York, N.Y.

Joseph Martin Resch of Vallejo, California, has been granted patent, Number 1,371,440, for Automatic Camera.

Device for Making Stereoscopic Photographs, patent, Number 1,371,438, to William James Prucha, San Diego, Calif.

Patent, Number 1,370,922, Photographic Film, to Paul C. Seel, Henry Combs, and Richard Kept, Rochester, N.Y., assignors to the Eastman Kodak Company, Rochester, N.Y., a corporation of New York.

Patent, Number 1,370,896, Photographic Developer and Method of Developing Latent Images, to Alonzo S. McDaniel, Rochester, N.Y., and Adolph H. Nietz, Rochester, N.Y., assignors to Eastman Kodak Company, Rochester, N.Y., a corporation of New York.

Apparatus for Engaging and Fastening Plate-Holder Frames and Film-Holders on the Body of Photographic Apparatus, patent, Number 1,370,529, to Henri Fouasse, Paris, France, assignor to the Société d'Optique et de Mécanique de Haute Précision, Paris, France, a Joint-Stock Company of France.

Harry F. McMahon of Toronto, Ontario, Canada, has been granted patent, Number 1,369,753, for Camera.

Patent, Number 1,369,560, Photographic Printer, Joseph W. C. Shipman of Los Angeles, Calif.

Pictures in Our March Issue

EDITOR PHOTO-ERA MAGAZINE:

Dear Sir.—I have just been deriving much pleasure from looking over the March number of your magazine, which happened to be brought into my studio, and I cannot resist the temptation, I have, to make a few remarks about "The picture criticised this month." A veteran in photographic art-criticism (I am past eighty-two) I must say that I never saw a finer landscape-picture rendered by photography. Granted in the beginning that there has been "faking"; but that doesn't matter, for it has been so understandingly done that it is all the more creditable; it is altogether a

delight to look at it. Your critics have been able to appreciate its excellences to a certain extent; but none of them knows why it is excellent. It has the elements of grandeur and impressiveness without being too wild and rugged. The point of view chosen is perfect. You have the immediate foreground group of trees on the left repeated in a more distant and secondary form upon the right. The stems of the left group cut conspicuously dark against the light sky, while those on the right relieve light off of dark which gives contrast. The straight line of light against the base of the mountains gives firmness to the picture, and the diagonal lines of the mountains contrast this. These lines are conducive to grandeur. The roadway sweeps into the scene with a curve that contrasts the direct lines. The deepest shadows are in the immediate foreground, and the dark shadows that cross the road give crispness and force to the picture. Fortunately, these shadows curve in a picturesque way over the inequalities of the surface, and the further patch is much narrower than the nearer which greatly aids the perspective. The surface of the mountains is broken up by picturesque detail without too much definition. Two things only could improve the picture, namely if the sharp lights on the tree-stems in the group at the left edge could have been omitted and the very close duplication of the dark spots of foliage of the left group of trees against the sky and the right group at the upper right corner.

Furthermore, I must compliment you on your illustration, "Off the Beaten Track," by Will A. Cadby. It is one of the most beautiful renderings of a snow-scene that has come under my observation. Snow-scenes, as we all well know, are exceedingly difficult to manage, too apt to turn out raw spots of black and white. Now, the half-tones in this print are wonderful, the middle distance is exquisite, and the lines of composition of the furrows in the snow and tree are perfect. Curiously enough, the little deep spot in the center, darkest in the picture, is of decided use as giving all the other darks their proper value.

It is gratifying to look upon such pictures as the two in question. I am sorry to say that there is a vast quantity of time and material thrown away upon the most commonplace bits that are utterly devoid of merit as artistic subjects.

Very respectfully yours

XANTHUS SMITH.

[The writer of the above criticism is a veteran writer on matters photographic. His illuminating articles have appeared in the professional photographic magazines and annuals of older days, viz., *Wilson's Photographic Magazine*, *Mosaics*, *Photo-Times Annual*, and others.—EDITOR.]

Wrong Conclusion

PHOTOGRAPHER (a little peevishly).—"Really, can't I do something to induce you to look a little more pleasant?"

The Glimp One (brightening up).—"If you only would, I'll never breathe it to a soul, old man! Is it Scotch or Rye?"—*Buffalo Express*.



WITH THE TRADE



A New Booklet by G. L. Harvey

WE have received Book No. 40, "Automatic Plate-Development" by G. L. Harvey, and are glad to recommend it to photographers who require a simple, practical method to develop plates. Mr. Harvey gives definite instructions how to develop three slow and two fast plates, and gives suggestions how to obtain the best results with others. The booklet is supplied regularly with the No. 2 Harvey Exposure-Meter; but it may be obtained from G. L. Harvey, 105 South Dearborn Street, Chicago, by sending thirty-five cents in stamps.

Wollensak's "Studio-Lenses"

PROFESSIONAL, and not a few amateur photographers, will be very much interested in a new booklet issued by the Wollensak Optical Company, Rochester, New York. The three popular Wollensak lenses, Vitax, Verito and Series II Velostigmat F/4.5, are described in detail; and, in addition, the reader will obtain much practical, general photographic information. The booklet is well printed and illustrated by excellent halftone-reproductions of pictures by A. E. Murphy, William Shewell Ellis, Philip Conklin, W. E. Burnell and Edward Weston. Photographic dealers, or the manufacturers, will be pleased to send a copy of "Studio-Lenses" to any reader of PHOTO-ERA MAGAZINE.

Arthur A. McCready—Photo-Finisher

PHOTO-FINISHING of the right sort is often difficult to obtain. There are many well-intentioned amateur and professional photographers who call themselves photo-finishers and who can develop a film and make prints; but their work suffers sadly by comparison to the negatives and prints made by specialists in the art of photo-finishing. Consequently, whenever we know of a photographer who is an expert photo-finisher we take pleasure to refer him to our readers. In the present case, we are glad to call attention to the work done by Arthur A. McCready, 19 Highland Avenue, Elizabeth, New Jersey. We have inspected his workmanship and are confident that our readers will be pleased with his photo-finishing service.

The Bildsicht Camera

CERTAIN critics have praised the perspective or viewpoint of photographs made by European continental workers. The secret lies probably in the fact that they use their cameras on the level with the eye—contrary to the habit of workers who hold their cameras near the waistline and look downwards upon the view-finder or upon the reflected image in reflex cameras.

Whichever way is preferable, readers will be interested in the Bildsicht or "view-sight" cameras made in Hanover, Germany, and advertised in this issue. The criticism we have made with regard to purchasing cameras from foreign sources does not apply to the firm of Bildsicht Camera-Works, Ltd., Hanover, Germany. Intending purchasers may correspond direct and in English with the above-named firm; or, if pref-

erable, may obtain the camera through one of their dealers. PHOTO-ERA MAGAZINE has a few illustrated catalogs (printed in English) of this practical and well-made Bildsicht Camera, which will be sent to those who are actually interested. As to prices, these are fluctuating with an upward tendency in order to arrive at prices that are equitable in the United States.

Appreciating the superior perspective of pictures made from a position on the level with the eye, the Editor made all his Nuremberg and Rothenburg (Bavaria) views—published in January and February, 1910—at that height, placing the camera on a high tripod and examining the reflected image in the finder by means of a pocket-mirror, held at right angles with the view-finder. This difficulty could have been avoided, had he used one of these practical Bildsicht cameras, whose advantages must be obvious to the discriminating photo-pictorialist.

The Right Way to Use Japanese Watercolors

THE coloring of photographs is a delightful pastime for the amateur and an added revenue for the professional photographer. To color a print properly is not unduly difficult; but there is a right way and a wrong way to do it. The Japanese Water-Color Company of Rochester, New York, announces that it is prepared to show any photographer the right way through its Department of Instruction. The three months' instruction now offered, at a nominal fee, consists of criticism of the pupil's work, with needed suggestions and explanations. Any reasonable number of prints may be submitted during the course. Particulars may be obtained by writing to the company.

G. Gennert, Agent for Contessa-Nettel Cameras

ELSEWHERE in this issue, G. Gennert, 24 East 13th Street, New York City, announces that he is now sole agent for Contessa-Nettel cameras in the United States, Canada and Mexico. This well-known line of high-grade outfits comprises about forty different models for the use of the advanced amateur. The workmanship is of the best, and most of these cameras are fitted with Carl Zeiss, Jena, lenses. Some are equipped with Steinheil and Hugo Meyer lenses at very moderate prices. There are film or plate, vest-pocket, coat-pocket, stereo and combination panorama-stereo models. Some are finished in teak-wood and are rich in appearance. The exclusive type of focal-plane shutter supplied with Contessa-Nettel Focal Plane cameras is an innovation that ensures freedom from jar and strain. We are asked to state that the sale of Contessa-Nettel cameras is to be restricted entirely to legitimate photographic dealers. Descriptive matter may be obtained from the importer or from photo-dealers.

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Wollensak World

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ROCHESTER, NEW YORK



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LENS AND SHUTTER
INFORMATION

Vol. I

MAY, 1921

No. 5

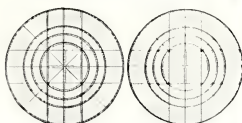
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The two figures above are reproduced from marginal portions of negatives made respectively with (left) an anastigmat and (right) a Rapid Rectilinear Lens. Note the poor detail rendered by the R. R. Lens.

one and one-half times as fast; the Velostigmat $f:4.5$ is three times as fast. That's why a Velostigmat would increase the efficiency of your camera.

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Address all inquiries concerning the use or selection of lenses to the Service Department, Wollensak Optical Company, Rochester, N. Y.

An Interesting Booklet for You

If you make pictures as a hobby or pastime, you'll want our booklet "Lenses for the Advanced Amateur."

If you are a professional or studio photographer, you'll find something of interest in our new booklet "Studio Lenses."

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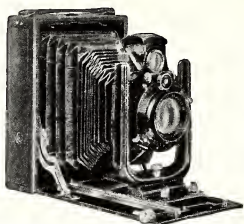
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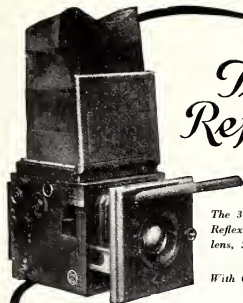
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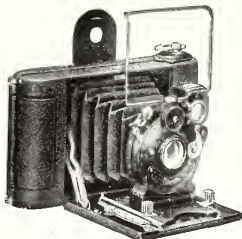
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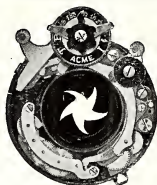
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The Book of Nature

FREDERICK B. HODGES

"A little have I read in Nature's infinite book of secrecy."—*Shakespeare*.



It might seem that if this great genius could only read a little in Nature's book, ordinary mortals would have small hope of reading any. We need not be discouraged, however, for Shakespeare really read a great deal, and any one to-day can read some. Indeed, hosts of people have a wonderful copy of this book given them when they are born, and seem also to read it easily. Others have to learn how to do so to a greater or lesser extent; but we may all own a copy, bound to suit ourselves, illustrated just as we like, and we can add to the text daily, carrying it always with us.

The book of Nature is always a book of inspiration; instinctively we transfer from the outdoors to its pages impressions that bring us into a more intimate sympathy with life. Reading it results in many big moments, interest never flags because there is not a flaw in it. The opportunities to read it are endless, the dulllest day has its beautiful, changing aspects, for always in Nature there is the same infinity of variation.

There are no "best sellers" that can approach it, for here is a book that charms with its first word and grows better as we read—a book that has no ending, a mystery-tale that is never solved, written by a hand that controls with absolute certainty our life and all that life means, here and hereafter.

All of the pictures in Nature's book are perfectly set and all the stories beautifully told; but it happens, once in a while, that we come upon a particular effect before which we stand in silent reverence, knowing that art can never hope to rival it. We will never see just this effect again and we should write it in our book so thoroughly and lovingly that it will delight us always in memory.

Some of the illustrations in our book are of

value to us in one way and some in another; but they are all of worth, more for what they mean than as pictures. The Sand-Pine, for instance, stands where I see it many times each year and the tree and its surroundings have a persuasive charm for me; a satisfying restfulness pervades their atmosphere.

The Sand-Pine

With outstretched, beckoning arms the Sand-Pine stands in its yellow sea, a ship with all sails set.

In its heart what memories must live, what companies have come from the noisy world and listened to its low-cried refrains, its elated hymns, its dreamy lullabies and softly whispered airs. It is a spirit-music that lingers with us long; its notes are like the blended voices of the past, the present and the years to be.

When the snow lies deep in winter or lingers in the sheltered hollows in spring; when the woods are filled with the joy of June and sweet with summer-flowers; when the great red sun sets behind the autumn-hills, still the Sand-Pine blossoms in its barren home.

In our little tender day-dreams it seems to be a living friend, always lifting a cheerful face to greet us and creeping gently a little further into our hearts each time we pass. We love its golden, glowing boughs that end against the sky, its soft greens that change all day, and its shining silver-gray in the dying light of evening.

Let us never hurry by intent on some distant, unseen beauty; but pause in these wild lands and roam over the long, hushed shadows of this field of gold; thread our way among the fantastic lights that fall with the twilight and listen to the fairy voices that sweep with the wind around us. There is never a dull, gray day by the Sand-Pine; but each one is like a reflection from a beach of golden bars.

There is only one way to read Nature's book rightly, only one way in which the accruing benefits are made manifest. Communion with Nature is communion with the Maker of Nature, and if we read her book without finding spiritual solace we have failed. Cowper expressed it perfectly when he wrote, "Nature is but a name for an effect, whose cause is God." Shall we so school ourselves that this love flourishes continually in our hearts, its beautiful and wonderful influence ever deepening our appreciation of life, or shall we but scratch the surface and go on without proper thought as to why we have it, or what it means to us?

When Ali Baba wished to enter his cavern and extract something of value, he was obliged to speak the magic words required to open its doors. It is the same with us to-day. The cavern of the depths of Nature-love will not open wide its doors unless its "Open, Sesame" is spoken in our soul. Just as the robber's cavern was filled with riches, so is our heart when it is placed in our body by our Maker. No matter what we do in life, our daily work is tinged in some degree by our love of Nature; it influences us constantly; even in the restless town we can see the sky with its marvelous shades of color and soaring clouds, and feel in the air the strength of Nature's hold upon us; and in the open where we circle the fields, still and fair, skirting the edge of the forest where the dark, green beeches stand with their tops together against the sky, the full meaning of her influence as far as we can comprehend it, comes to us most vividly.

Many of the best pictures in our book of Nature are those of evening when perhaps we are peculiarly sensitive to her mystery. I have added many thoughts to my copy along the evening-road.

The Evening-Road

The twilight opens a quiet way along the road, crossing it with dark rich shadows, and lighting the distance with a last glow of brightness. With what tenderness evening seems to hush the earth to sleep:

"'Tis she whose hand with loving care,
Lightens the burdens all things bear."

The evening road is the road that dips into the hills, that winds among the trees, that ribbon-like sweeps past the wood and over the little brooks and brown-bedded streams.

It is a road of dreams, where our fancy pictures an endless procession, phantom-like in the soft dusk, of the travelers of the past. They seem to beckon us to follow, up the hills and down the vales, through villages old and gray, as if around

the bend they would show us that this road ends, like the road which all of us some day will take, in the city of our dreams, the land that is the desire of our heart.

Dickens describes, "A multitude of people and yet a solitude." Here it is the opposite, a solitude and yet a multitude; for here on this quiet way, sometimes by the open fields and meadows, sometimes past the hillsides or through the deep, hidden places of the wood, we may find a perfect solitude; but our mind is filled with recollections of days and friends of the past. In all this quiet beauty they seem to surround us, it seems to be God's road and we in the midst of a multitude of the heavenly host.

Coming thus to the evening-road when the bright day is done, behold, it has become a wanderway, a wandertrail, journeyed over carelessly by some, thoughtfully by others; where some men have found and others have hidden their hearts. No call in Nature is more insistent, nothing so suddenly quickens that mysterious sense lying passive in your heart waiting to be awakened. It is a thrilling call, so tenderly does the road unfold before us, so surely does the charm of its beautiful, straight stretches and graceful curves lead us along its way.

Perhaps the evening-road runs through a yellow wood aflame from a golden sky, or through a wood of somber pines with still, shadowed nooks under their dark shapes. Is there sweeter music than the soft refrains the wind whispers along its way? Can you store your heart with greater wealth than the sense of reverence that comes to you on this path to Nature's haunts?

Wherever it runs, warm and fragrant in summer, cool and gray in spring, drowsy and dewy in autumn, its restful quiet is certain. Here we come in the dusk and treasure the dear memories of life until the flame of love glows brighter in our heart and we see that amid all the wild sweetness of the roads, the smile of the evening-road is fondest and echoes truest in our soul.

We love the brooks, the woods, the hills, the fields and all the beautiful places of Nature, but we remember the road, and little glimpses of its sweeping curves and its shaded fragrant ways flash across our mind as we go about our daily duties.

No one can write your book of Nature for you; you must do it yourself. She will never fail to inspire you; the light that shines across the fields, the wind that murmurs through the wood and the soft beauty that is blended in the depths of the distance are all waiting for your heart to open and take them in. Once you understand clearly that it is not what some one



THE SAND-PINE
FREDERICK B. HODGES



THE EVENING-ROAD

FREDERICK B. HODGES

else has written about Nature that should guide you, but what you see and interpret yourself that matters, you are on the right road and your book has a permanent entry.

In writing in your book of Nature you must not always depend on what is actually before you; you must not be bound hard and fast to the fact that here are trees of wood and green leaves, here are earth and grass and growing things, all good to look at with the eye; but that here is much more if you look with the mind, if you bring into play your imagination. Without imagination, you cannot enjoy her beautiful mystery. If you find a line of dullness in your book it is because some of the magic has been left out, the fullest measure of which is necessary and which imagination alone will supply.

The contents of Nature's book, then, are not to be lightly considered. It is only through having a heart of poetry and a rich imaginative sense that these best things will be written in its pages, and when we go out in search of them over the wonderful hills, through the alluring woods, along the graceful roads and beside the singing brooks, we feel that we are finding even more than we looked for, that somewhere in

our inmost soul we have sounded the best note of the scale.

Nature never poses; but in any of her moods she presents a perfection of arrangement that eclipses any pose we can conceive. Love for her is something that lures us to her places of delight; that takes us journeying out to the healthful hills and pursuing the cooling streams that heal our wounded spirit; that comes to us in the wind that stirs the fresh spring-leaves and in the life that bursts forth in the May flowers and that fills all the radiance flung so lavishly over the earth.

There is a thrill when we feel the sorcery in the crimson skies at sunset; a perfect sense of pleasure in the sweetness of the careless woodland-path breathing its leafy, friendly love upon us; something that pulls at the strings of our heart in the high-road we ramble over with the grass stirring and whispering and the trees leaning in the wind.

My book of Nature contains entries of love for all the trees; but if there is any variety that sings a purer song in my heart than the rest it is the gray-birch which seems to me to be one of God's poems.

Under the Birches

It is a snowy fleet with spreading, green sails that stands along this peaceful trail; the breath of the waysides and the distant woods is blown along its way, and with their droning music is blended the voices of a land of dreams.

Under the birches the restless clamorous city is forgotten; all about us is a mysterious presence, alive and astir but not to be seen—a hidden joy, yet none the less real. He who does not devote

loveliness. The air is taintless, the reaches of wilderness gleam with color, the black boughs of the spruces ery their wild, high songs in the wind, the purple mist enfolds the distant hills and here under the birches, no matter which way I chance to look, no matter which way the shadows fall, the smiles of Nature upon me are tender, healing and revealing.

Under the birches the doors of my heart are opened and I hear the tales the grasses are whispering, the shadowy stories the south wind



UNDER THE BIRCHES

FREDERICK B. HODGES

himself in some degree to the love of Nature deprives himself of one of the greatest privileges of life. Her richest beauty is that in your heart; the witchery of these starry, glistening trees, the cool and silence of their shining foliage, the tender harmonies of color that bathe the ground beneath them and the rare perfume that fills the air; you cannot know these things unless a spirit of true love flows with the blood in your veins.

It is with a quickened breath I hear the songs of Nature, that I see her charms beckoning to me as I pass along the ways I love so well, and my heart strays on with the murmuring breezes; with my footfall sound the ghosts of dreams, and out of the shadows Nature lifts her face of

brings from the hill-tops, the mystical legends the pines are sighing and even the thoughts that haunt the shy woods-blossoms.

Those of us who strive to perpetuate some of these effects by means of the camera, should study our copy of Nature's book most faithfully because it is our love of Nature and the way it guides our thoughts that determines the worth of our pictures. We are all a part of Nature, and our work depends on how perfectly we realise this truth; on our serious study of her ways and being able to adapt ourselves to appreciate her effect upon us. If you go to Nature's great play- or work-house often enough, you find that something is gained there that cannot be acquired elsewhere.

But, if you make pictures, make them fearlessly; let them express, be it in ever so slight a measure, the Nature that you yourself see.

If you make them well you must think well, for always the hands are guided by the mind. Remember, what a truly rare thing is a high aim and be sure to keep yours high. Nature affords a generous measure of bracing inspirations and endlessly interesting opportunities that remind you of this importance and there is always a halo of purity over every offering she gives us.

You must get the whole air of the outdoors into your book; write into it the glory of the sunshine and the cool of the shade; fill it with the emotional influence of beauty; show that you appreciate the privilege of seeing the glimmering vistas along the forest-brook, that the overspreading sunset hues flood your heart as well as the earth.

"God began to talk to us ages before we were born"; yet whether our study of Nature's book be where the violets nestle under the tall willows, or in the wideness of the summer-meadows; whether our thoughts be of the same purity as the warm wind that blows in the marsh, or as reverent as the solemn songs of the great, dark pines, we will always find as we look back that we have made too little of Nature-love and failed to appreciate its importance.

Our love of Nature, so old and so new, should possess us constantly; not simply as we find it in the hushed summer-woods, or feel its force in the hazy morning-hills, but filling our heart as the air fills our lungs.

Our pictures, too, should hold secrets that are not revealed at first, whispers of some idyllic mood of Nature. I am not particular whether you call your work art or not; but it must be an expression of your impression of the subject. Many examples of so-called art do not express any one's idea of anything. They are merely bizarre. There is such a thing as originality, and such a thing as eccentricity.

A sharp picture is a very literal thing. Exceedingly sharp pictures are apt to be filled with jarring notes, as if the maker's touch lacked tenderness; they seem in a way to be empty abstractions. We instinctively, on the other

hand, think of a picture softened to a suitable degree, as the product of a poet's hand perfectly adjusted to his mind; we feel that he has subordinated everything that warred against a proper harmony, yet when we go too far with softness, with arrangement or construction, we become weak, we exaggerate and strain for effects. In some way in each picture there should be a special revelation of the maker's meaning, and in his work as a whole there should be concrete evidence of his convictions.

Communing with Nature, rounding out your copy of her book, is like holding the same sweet communion with music. Many times I sit at the piano and wander from one key to another just playing beautiful chords and lovely intervals that roam in my mind. So it is with Nature-love; many days I stray over her sweet keys with thoughts and sensations that are a medley of wonderful impressions, lights, shadows, colors and tints, masses of form and harmony—effects that have been sealed up in my heart for days and years perhaps. They are vague and shadowy impressions but in the end are invaluable, that furnish always a sense of rest—a quiet, pure delight that takes me again to the little marshy pond where I heard the frog's shrill piping, to the road that leads to the far blue hills.

I know there is a place in the hills where I can climb and wonder at the glory uplifted around me; where I can watch the tall straight pines as they brood in the quiet light, or swing in the wind. These things do not talk in our language; the gray stones in the field, the old rugged trees, and the brooks we walk beside; but they seem to converse with something in my blood; there is something in Nature's manner that shakes me as if a spirit had passed by, and she takes my hand and will keep it to the end.

And so, as I have loved the old paths and their memories are ever with me, I face the new paths secure and unafraid, keeping my vision clear, knowing that as I turn the leaves of life, I shall be guarded on the path ahead as I was on the old path, by a Presence that never has and never will fail me. For as we love Nature, we love what Nature really is, we love what is back of it all; whether we believe it or not, we are indissolubly linked with its Maker.



PURE, deep blacks in photography are contrary to nature, and frequently appear in photographic prints. When deep shadows in portraiture are shown as pure blacks, the result is not only untrue to nature, but inartistic. They can be excused on no ground, whatsoever. As these intense shadows are quite transparent in

the negative, they can be easily modified to print less black and still represent a dark tone. This work can be done with the aid of a soft lead-pencil, or some light watercolor applied uniformly with a brush to a piece of fine tissue-paper fastened at the edges of the negative.

W. A. F.

Getting More Business by Using Different Displays

FRANK H. WILLIAMS

THE case in which a professional photographer displays the samples of his wares in front of his establishment is like the show-window of a retail-store. This case may be hung to the wall at the side of the stairway leading to the photographic studio, or it may stand on the curbing in front of the building in which the photographer is situated. But no matter where this case is placed or what particular shape it takes, it is, nevertheless, the photographer's window-display.

Now, window-displays are recognised by retail-stores as being one of the most effective means to obtain patronage that is in the possession of the store. Time and again, stores have demonstrated the fact that a good display of a certain line of goods means big sales for those goods. And, as a consequence of this well-known value of the show-window in making business for the retail-store, most stores nowadays spend a lot of time and money in making their window-displays just as attractive and just as powerful selling-agents as possible.

All this being the case, it would seem as though photographers might spend more time and thought upon their own show-windows with considerable profit to themselves.

And it is the purpose of this article to suggest some of the things which might easily and inexpensively be done to give greater selling-power to the photographer's show-windows.

One of the outstanding features noticed about the window-displays of retail stores is that these displays are changed with considerable frequency. Nearly all leading retail-establishments in the dry-goods and clothing-lines make it a practice to change all displays once a week. Now and then, a store is found which makes a still more frequent change of its displays. And not so very long ago a Philadelphia women's wear store found that daily changes of its window-displays resulted in a very definite increase in its business.

From all this, it becomes evident that most photographers could change their displays more frequently and make a gain as the result of these changes. How often the photographs that are placed in the photographer's window-displays one month are there the next month and the month after that and six months or a year later. And what a bad impression such displays give to women who, naturally, are right abreast of the times in the matter of fashion and who must, inevitably, feel that any photographer is "pretty

slow" who tries to get business by displaying photographs which were made before the present-day fashions came into style!

Frequent changes of the displays in the photographer's show-windows would seem to be something worth paying more attention to in these days. It takes but little time to change the photographs on display and it costs almost nothing to make such changes.

Another very noticeable feature about the retail-store display-windows is their timeliness. Retail-stores are always framing window-displays which are based on a change in the season, or on some important local event or upon some other timely feature.

Why could not photographers adopt the same plan with success? Suppose, for instance, that some big and important local civic event is being planned. Suppose that the affair is in the hands of a committee composed of some of the leading men and women of the city. And suppose that some photographer has made photographs of nearly all the members of the committee. Why could not he change his display to include these photographs? Why could not he label each of these photographs with the right name and then state the position and duties of the individual in the coming civic event? Would not a display of such a character as this attract a lot more attention and get a lot more people to thinking about the photographer than any ordinary display of photographs made a year or so ago which failed to have the feature of timeliness? And would not a lot of people talk about the display? And would not all this word-of-mouth advertising tend to make more business for the photographer?

Suppose, again, that the photographer has made some photographs in which new-style hats are very prominent. Why could not he place such photographs in his exhibit and call attention to the new hats shown in the pictures? Surely such a display would interest a very much larger number of women than would any ordinary display which lacked this feature of style and timeliness.

Still another interesting point about the window-displays of the leading retailers is the fact that their window-displays are always and invariably clean and fresh and pleasing in appearance. The glass in the windows is always washed and is never dusty. The floors and backgrounds are in spick-and-span condition. And the goods on display look as though they had just been taken from the original packages.



HORIZONTAL LIGHTNING-FLASH

DR. J. E. BRINKMAN

In this point there lies a very good idea for photographers. A photographer's display should look just as attractive, just as fresh and just as pleasing as possible. Old, faded prints, or pictures that are soiled or faded or old in appearance, will not bring business to the photographer as will new, fresh prints which look as though they had just been made the day before. And a background for the case which is faded and old or dusty will not give as snappy or pleasing an appearance to the display as will a cloth or painted background which is fresh and absolutely cleanly and new in its appearance.

The general appearance of the photographer's work is an extremely important factor in the photographer's business. If his work has a look of superiority, then he has very little difficulty to obtain a greater price for it. If his work looks only average, then he will get a low price. And so on.

And, in this connection, it is interesting to note that there is a certain amount of psychology in the way that a customer will look at the photographer's work. If the environment in which the photographer does his work is quite superior, then the customer is much more apt to feel that the work is superior than if the environment is only average or not even average. And if the surroundings in which the photographer does his work are shabby, dusty and even soiled, then the photographer is going to be battling against a pre-conceived idea that everything he turns

out will also be shabby, dusty and below the average.

Now this thing of putting the customer in the right mood begins before the customer sets foot in the studio itself. It begins outside the studio with the photographer's display. If this display is of the sort which is calculated to make the customer feel that the photographer is up-to-the-minute, does superior work and is just about the best there is, then that customer will be in the right mood to be pleased with almost anything the photographer does and to be willing to pay almost any price the photographer wants to charge. But if this display is of the sort that is likely to give the customer an impression of dowdiness and of near-failure, then the customer is not going to be so easily satisfied with the photographer's work nor will the customer be so ready to pay whatever price the photographer asks.

Really, the importance of the photographer's "window-display" has not been emphasised enough in the past. In fact, this very effective form of promotion-work has been rather sadly neglected.

Why not do more with the window-displays? Why not use different displays from time to time? Why not treat them more in the way that a retail-store treats its show-windows?

Photographers want to get all the business that they can handle. This looks like a good way of going after more business inexpensively. So, why not try it out at *your studio*?

Portraiture at The Camera Club

FLOYD VAIL, F.R.P.S.



N exhibition of pictorial portraiture was held from December 15, 1920, to January 15, 1921, at The Camera Club, New York, comprising fifty-three examples of the work of Karl Tausig of New York, who is a member of that organisation.

Mr. Tausig approaches portraiture entirely from the standpoint of the pictorial. He strives not only to secure a likeness or a characterisation, but seeks to add some touch of sentiment, feeling, or an action or effect; and in this he succeeds admirably and almost invariably. His prints are something more than photographs; they are pictures. In future years, they will be cherished by the subjects as indicative not only of a resemblance, but of the mood and habitual attitude of the individuals at the period of life depicted.

There is considerable uniformity of quality in Mr. Tausig's display, shown in the textures and general excellence of his work. This I attribute, in no small degree, to the fact that he uses only one camera; size and brand of plate (5 x 7); one lens—a Smith Visual Quality, 12 inches focal length; one kind of paper—Artatone. All his negatives were made in homes; none in a studio. Thus he has had an opportunity to master the few appliances and arrangements he has employed, and can, therefore, repeat any success at will. This may teach a lesson to some who may read this, for many get all sorts of results because they are continually resorting to different methods of working. For too many tools and experiments are apt to cause more or less failure in all directions.

Mr. Tausig has attained a high rank very quickly. He has been a portrait photographer only for about four years. Now his examples are hung at the best exhibitions in this country and abroad; and it has all been accomplished since 1919.

Perhaps, Mr. Tausig is seen at his best in his child-pictures. "Hilarity," shown at The London Salon, 1920, is a masterpiece. A child, little more than an infant, is depicted laughing most naturally and gleefully, and in all the exuberance of healthy childhood and innocent loveliness. The modeling is exquisite and the flesh tints, textures and pose are exceedingly admirable. "Wonder-Eyes" is likewise a child study, shown in 1920 at both Pittsburgh and

Toronto, and is a most truthful and enjoyable rendering—the eyes wide open in wonderment, the tones very subtle and the whole very satisfying. "Master Tom," a boyhood-presentation, was the forerunner of Mr. Tausig's success, for it was exhibited at Toronto in 1919 and then awarded the blue ribbon in the home-portrait class at the Atlantic City convention, in 1920. For outstanding merit, it is among the best in Mr. Tausig's exhibit. It combines with beauty of pattern real expression of youthful character and nonchalance. "The Spell of the Fairy Tale" shows a little girl in absorbed attention, and oblivious to everything or everyone but that which is attracting her; is quite natural and perfect in pose; the modeling is faultless, and is one of the very best examples of child-photography I have ever seen. It was accepted at Los Angeles, 1921. "Curly Head," "Sweetness," "Study of a Boy's Head" and "When John Henry Smiles" are exceptional renderings. "Huck Finn," shown at Toronto, 1920, would have delighted Mark Twain for an illustration. "A Country Lad" is similar in type and equally well done. "The Climax of the Story," and "Sister," "Me and Dolly" present the quaintness and coyness of the little girl or boy, so much admired in early life and which so soon depart. "Cousin Bill" is an unusually fine example of boyhood-attitude and pert expression, and was honored by being hung at The Royal Photographic Society's exhibition, 1920. "Jeanne Dear" and "Margie" deserved the attention and high praise they received.

Portraits of men were well represented. A very forceful print was "The Movie Actor," accepted at Pittsburgh, Toronto and the Royal, 1920. This is full of character and poise and, in all respects, outstanding. "Hon. Evan Morgan" brought Mr. Tausig the blue ribbon in the grand portrait-class at Atlantic City, 1920, and features a fine head and figure, delightfully posed, full of strength and a masterpiece of artistic work and characterisation. The well-known actor, "Eugene O'Brien," appears in familiar attitude and garb, in a low-keyed rendering, very rich and toneful in textures. This picture is a duplicate of one that was accepted at Los Angeles, 1921. "The Old Philosopher" appeared at Pittsburgh and Toronto, 1920, and it would be difficult to surpass it as a portrayal of an elderly gentleman. All the lines and character markings of a long



WONDER-EYES

KARL TAUSIG

life of study, concentration, labor and, perhaps, of suffering, are clearly delineated and seen. "Sketch-Portrait of Mr. L." is most happily spaced and wrought. Shown at Pittsburgh and Toronto, 1920, "The Student" is deserving of close study and much commendation.

Mr. Tausig scores many a triumph with his portraits of ladies. "The Lady and the Dog" attracted much attention and received very favorable criticism at the Royal, 1920, and was one of the foremost pictures at Los Angeles, 1921. It was the largest in Mr. Tausig's collection, measuring 24 x 30 inches. The tonal values are excellently arranged and distributed and in all respects it is extremely meritorious and praiseworthy. "Sketch-Portrait of Mrs. L." was at The London Salon exhibition, 1920, and among the pictures selected to represent the best American work shown afterwards at The

London Camera Club. It exhibits a profile pose and is a choice example of a sketch done photographically. This is one of Mr. Tausig's very best, a delightful presentation of a charming subject. "Sketch-Portrait of Mrs. R." is somewhat similar, except that it discloses a front view, is more "sketchy" and striking in attitude. This will be heard from in the future. "A Sister of Mercy" suggested, if it did not really present, one of those ministering angels, so lovely and so loving. It left nothing to be desired as a pictorial result. "Martha" was a portrait of a demure maiden, a full-length figure, high in key and satisfying in all its details. "Mother-Love" was exquisite in its textural beauty and pose; showed a dear, old, careworn face full of love and motherly kindness. "Mother Dear" was a low-toned specimen, cleverly arranged in the space, offering a view



MASTER TOM
KARL TAUSIG

of a lovely personality and was the chief attraction for a number of painters who saw it. "The Coquette" was truly coquettish—her large, black, lustrous eyes following one wherever one went; and it was outstanding, not only in size, but quality. "Rhoda," at both Pittsburgh and Toronto last year, is a fine space-decoration of a handsome and interesting young lady that does much credit to the artist. "The Madonna of the Ghetto" is a homely and convincing representation of a denizen of the slums, suitably attired and wonderfully suggestive in movement and carriage. "Sweet Motherhood" is a two-figure study of a mother and child, the babe seen fondly caressing the mother and the latter manifesting in her countenance the joy and love

of motherhood—a convincingly tender and enjoyable work.

What, probably, has contributed greatly to Mr. Tausig's success is great patience. One of his best pictures is that of a child which was so unruly, that four hours was required to bring the contest of photographing it to a triumphant conclusion. Yet our artist patiently waited, and finally succeeded and several salon honors have been his reward. Again, he wins the confidence of children and their coöperation by telling them stories and thereby obtaining something of the mental characteristics. Thus it is seen that Mr. Tausig works with his head as well as his hands, and is very original in his methods. In this respect, he is worthy of emulation.

An Unusual Branch of Photography

LEE BONIFACE COWART



PHOTOGRAPHER of Hamilton, Ontario, carries on a very brisk business at funerals by photographing the dead. Of all other businesses, that of a photographer of dead people might be imagined as the least likely to afford thrills. What could be less thrilling than to aim a camera at a corpse and order him to assume a ghastly smile, and make a picture of it on a glass-plate? That is what the average person imagines; but some very unusual feats are sometimes accomplished.

This Canadian photographer, as has been said, does a good business in his locality. Rarely does a native of Poland, Russia or Serbia play the star-rôle at a funeral without being photographed. Although with Canadians, photographs are sometimes made of flowers at funerals, the custom of photographing the dead is limited mainly to those from foreign lands.

The procedure is quite informal. The photographer appears generally at the church with his trusty camera cleared for action. The coffin is placed on end against the wall, the lid opened, and the body of the dead person revealed standing upright apparently. About this gruesome centerpiece the sorrowing relatives gather.

On one occasion a commotion was caused by the deceased sliding out of the coffin when the picture was about to be made. On another occasion, the photographer's nerve was tested when the relatives demanded that the eyes of the corpse be opened to make the picture look more natural. The hardy camera-man complied, and the resulting picture was strange and horrible.

Sometimes the relatives would have the casket brought out of the church, lifted on end, and the lamented photographed in the open street.

One reason for the strange custom is said to be that the pictures are sent to relatives of the dead person in the old land—Russia, Poland—the idea being to prove beyond a doubt that the person in question was dead—or pretended to be—when the picture was made.

What appeared to be a miracle was performed by a photographer for an appreciative foreigner who had the misfortune to lose one eye. The gentleman applied to have his picture made to send away and wanted to look as well as possible.

By enlarging the picture and drawing in an extra eye, and reducing the picture again, the clever photographer was able to produce a photograph with two perfectly good eyes. When the foreigner called, he was filled with joy.





MACDOUGAL ALLEY
A. J. VOORHEES

An Experience in Low-Power Micro-Photography

PETER W. SAUL



NE day, not long ago, there arrived in the morning-mail a package that contained a dental broach and a letter, with a request that the instrument be photographed to a diameter of about $5/8$ of an inch to show as plainly as possible its construction.

The broach itself is but a very fine needle about $1/64$ of an inch in diameter, with sharp projecting barbs cut spirally from the shank. So fine are these barbs that they are visible only under a magnifying-glass—and here was a proposition to enlarge the image to about $5/8$ of an inch! A direct magnification of about 3 diameters is nothing unusual, but here was something that required a 40 diameter magnification, with only the usual commercial equipment at hand.

Several preliminary experiments were made, first with the focusing-tube and eye-piece of a small telescope; and, secondly, by using a small pocket-microscope in connection with a 10-inch lens focused at infinity. In neither case were the results successful.

But an article by Prof. E. J. Wall, F.R.P.S., in the January, 1915, issue of PHOTO-ERA MAGAZINE seemed to offer the best suggestions. By placing a $6\frac{1}{2}$ -inch lens on an 8 x 10 view-camera, a negative of 3 diameters was made on a Medium Iso D. C. plate, and by using artificial illumination from the side, and a white background. The best negative from a series of tests was placed before condensers, with the light well diffused, and an enlarged positive made. This gave an image of 9 diameters. This positive, when dry, was also placed before the condensers, and an enlarged negative made therefrom with an image of 36 diameters. When printed, what an awful looking object it was! In spite of the fact that double-coated plates were used, and rather dilute developer at about 50° Fahr., the image showed granularity and a lack of solidity that was rather disappointing technically and otherwise.

However, in the next experiment we determined to obtain as large an initial magnification as possible; and, requiring a lens of the shortest focal length available, a pocket-camera of a well-known make was pressed into service. Removing the lens, we mounted it on a lens-board of a 5 x 7 view-camera. The back of the 5 x 7 was removed and the camera was placed against the opening of a $6\frac{1}{2}$ x $8\frac{1}{2}$ view-camera. This back we also removed, and adjusted the camera to the front opening of an 8 x 10 view-camera. All joints were then rendered light-tight by means of focusing-cloths, and the whole arrangement clamped fast on a stout $1\frac{1}{2}$ -inch plank. When the holder that contained the broach had been fixed in position firmly, and the necessary focus obtained, lo and behold an image appeared on the groundglass of about 15 diameters. Glycerine applied to the glass rendered the image much brighter; but no amount of stopping down seemed to increase the depth of focus. The barbs facing the lens, being in a different plane from those at the side of the shank, reflected the light, and would persist in appearing as meaningless blobs of light. Furthermore, although a movement of an inch on the back-focus produced no apparent change, the slightest movement of the front focusing-screw meant total loss of definition.

Then appeared another fact to cause trouble. The slightest vibration, unnoticeable on the broach itself, caused the image on the groundglass to sway to and fro. So, blocks of resilient rubber were fastened under the four corners of the plank, and the exposure made about midnight, using a D. C. Medium Iso Plate, giving 10-minutes' exposure at F/16 and artificial illumination.

The negative was then enlarged on bromide paper to produce an image of about 60 diameters. This print was then retouched to give firmness to the parts that appeared out of focus, and then re-copied down to 40 diameters. The resulting print proved to be eminently satisfactory to all.



PORTRAITURE is by far the most important and most difficult branch of photography. It requires the skilful use of camera and illumination. When amateur-portraitists attribute their distorted effects to the light, by asserting that nature never mistakes, they err egregiously. Painters do not always picture all that they see, and omit undesirable objects. In warm weather, we use ice to preserve our food; when it rains,

we use umbrellas to keep us dry; and we wear eye-glasses to correct our defective vision. The professional portraitist employs screens to diffuse strong light and to lighten strong shadows. Deep shadows caused by strong illumination can be improved by skilful retouching. If unable to do this difficult work satisfactorily, the amateur-portraitist should engage the services of a recognised expert retoucher. W. A. F.



LADY GREY ROSES
J. HORACE MCFARLAND COMPANY



A STERN AND ROCK-BOUND COAST

CHARLES W. LONG

An Attempted Photographic "Come-Back"

CHARLES W. LONG



ALTHOUGH I might justly lay claim to the title of "old-timer," my photographic efforts have been so spasmodic and intermittent, at times having been allowed to lapse altogether, that to-day I fear I should be more appropriately styled a "back-number."

About thirty years ago I took up camera-work; and, though, since that time, I have never completely lost interest in things photographic, yet, I found, a few months ago, upon making an effort to "come-back," that the art-science had completely out-stripped me; and that if I expected to do any work worthy of the name, I should be obliged to learn all over again.

The object of this attempt is not reminiscence, although, no doubt, something along that line might be of some interest to present-day workers. What I wish to accomplish is to present to your reader, especially to the younger element, some of the things I have accomplished under rather difficult circumstances and with meager equipment.

I am accompanying this article with several

prints illustrating what I have done. I do not claim that these efforts are the best that it is possible to do, even with the rather make-shift facilities I am obliged to put up with; but they are at least as good, in my opinion, as some I have seen, made, probably, under much more favorable circumstances. Of course, I am speaking of photographic technique only—I make no claim to any artistic ability.

In my present country boarding-house, I am blessed with electric light; and there is running water in the bathroom across the hall. Time was, when my water-supply was a large white pitcher and my waste-pipe a twelve-quart bucket, one of which was always full and the other always empty, and the wrong one at that. But that is reminiscence—a sure sign I am growing old.

My darkroom is also bedroom, studio, workshop and living-room. I breathe the photographic atmosphere, waking or sleeping. There are wooden frames covered with cardboard to fit the one window and glass-lighted balcony-door. It takes but a minute to darken the room sufficiently to develop a plate or film. In the darkest

corner, where none of the wandering light-rays can reach my tray, is my developing-bench, made of two rough boards.

My darkroom-lantern is made of an old tin cigar-humidor, with a spoiled 5 x 7 plate set into an opening in the lid, and covered with ruby-and-orange fabric. It is illuminated by means of a 25-watt electric lamp. When I print a developing-out paper, I put in a 50-watt lamp, open the door and set the lantern under the bench, where I do my printing, then I develop on top. A curtain of brown duck hangs from the edge

in the periphery of the pans—one at each end of a balanced arm. The weights are chunks of brass and slivers of tin, which I made and verified myself. When I weigh an ounce of carbonate, I have to take about three bites at it, as the pans are not big enough to do it all at one load. But I've had 'em thirty years, and they never failed me yet.

I once had seven cameras, ranging in size from a 3½ x 3½ roll-film box-camera to a 14 x 17 view-camera. These got away from me in various ways, until my present equipment consists of a



ACROSS CASTINE HARBOR

CHARLES W. LONG

of the bench to the floor, as a "safety-first" precaution, although it is hardly necessary, if ordinary care is used in handling the paper. A piece of thin, yellow-tinted wrapping-paper, wrapped around the electric lamp in the center of the room, gives me light enough to see to develop and to fill my printing-frame.

I have three 7 x 9 composition-trays, a 16-ounce and a 4-ounce glass-graduate, a glass fixing-box for 4 x 5's and a galvanised wash-box for 4 x 5's and 5 x 7's, a two-quart fruit-jar and three or four bottles that contain my stock-solutions. For scales, I use an old pair of 25-cent balances. These consist of two pans about the size of a dollar-and-a-quarter each, suspended by three strings, diverging from a common point, to holes

4 x 5 Poco, of the so-called Cycle type, and a home-made view-camera, with two backs—one 6½ x 8½, one 8 x 10 inches. But I confine most of my work to 5 x 7 negatives, by using inside kits with the 6½ x 8½ back.

Of lenses, I have two: a Bausch & Lomb medium wide-angle of about 7½-inch focus, which covers an 8 x 10 plate; and an old Anthony Platyscope, of about 9-inch focus which works at F 8. Until within the last few months, I never used a shutter with variable speeds. For many years, I considered my old-fashioned, home-made, drop shutter the very limit of luxury. With a rubber-band accelerator, it was a very "fiend for speed." A long time ago, my father made for me a three-leaved diaphragm-shutter,

manipulated by means of bulb-and-rubber tube. There was nothing like it, at that time, on the market; and I believe it was the first diaphragm-shutter ever made. I still use it for most of my work.

I never use a watch to time anything less than 5 seconds; and I use the fastest plates I can obtain. I see a great deal in photographic journals to the effect that success or failure depends entirely upon exposure. Also, that there is a certain period of time, peculiarly adapted to each particular subject, above or below which it is not permissible to go except within what is termed the latitude of the plate; and that development is a fixed and absolute factor, subject to no adjustment or control. Probably, that is true, in the main; but I should like to have time and space to record some of my experiences in this direction, and to illustrate my article with prints from negatives I had made with various exposures and with different treatment in developing.

Although I am bound to admit that underexposure is not only possible, but might be said to be almost universally prevalent; yet, in the thirty odd years of my photographic experience, I have seldom, if ever, encountered an overexposed plate. I have given twenty times the exposure advised by the exposure-tables, and obtained a good, printable negative—much better, in fact, than the forced, underexposed monstrosities met with so frequently.

But I must confess that it is only since reading Mr. Cohen's article, in the August 1919 issue of PHOTO-ERA MAGAZINE, that I have been able to accomplish this last-named result. His idea of combining ammonium persulphate with the developer is a novel one; but the results he achieved seemed to justify a little experimenting with this agent; and, I must say, that some of the effects I have produced with it prove all that he claimed for the process, and even more. Its very simplicity commends it.

With an Eastman Portrait Film and persulphate in the developer, there seems to be absolutely no prohibitive limitations to direction or intensity of lighting, and the equalisation of printing-values. Halation through the branches of trees, against a bright sky is overcome, and the detail in foreground-objects, even against a bright light, is preserved. In cloud-work, it obviates, to a large degree, the necessity to use a color-screen; but used in connection with a screen, wonderful results may be obtained.

The following formula I found best for average subjects. The A, B and C solutions are the same as prescribed by the makers of the Eastman Portrait Film:

Stock-Solution A

Water.....	16 ounces
Sodium Bi-sulphite.....	90 grains
Pyro.....	1 ounce

Stock-Solution B

Water.....	16 ounces
Sulphite of Soda.....	1½ ounces

Stock-Solution C

Water.....	16 ounces
Carbonate of Soda.....	1¼ ounces

When ready to develop, I take:

Solution A.....	2 drams
“ B.....	2 “
“ C.....	2 “
Water.....	1½ ounces
10% Bromide Potassium.....	5 drops

These proportions represent a normal developer, and I believe any other normal developer will do as well; at least, as a basis for experimentation.

To the above, I add:

Water.....	4 ounces
Ammonium Persulphate.....	5 grains

Increasing persulphate and water still further flattens the negative. Bromide should be increased, too—also your stock of patience. You do not get much of the pyro-stain with this formula, only in your finger-nails; but you will find the same beneficial result has been obtained by the reduction of the highlights; so, you really have a more quickly printing negative with all the restraining effects of the amber-color in the shadows. Used on glass-plates, the halation is reduced to a very large extent and on either cut-films or film-packs it is almost entirely absent.

Since using the persulphate-method of development, I have discontinued using the color-screen on a great many subjects, and I really think I have obtained better values in some classes of subjects than I formerly did with the screen. By giving the additional exposure permissible with the persulphate developer, together with the full development that is possible without clogging the highlights, detail in green foliage is preserved, detail in shadows is emphasised and the contrast between the brightly lighted distance and the more shadowed background is very much equalised.

So that actual color-correction is about the only function that is left for the color-screen to take care of. Persulphate will not make the yellow center of a daisy appear less black, nor will it preserve the distinctions in the various shades of autumnal foliage, nor properly register the delicate gradations in clouds. But it will enable a more truthful rendering to be made of subjects



OWL—LOOKING BACKWARD

CHARLES W. LONG

that require a quicker exposure than is sometimes possible with the color-screen as, for instance, running water, surf, and in moving foliage on a windy day. For snow-pictures with their abrupt contrasts it is ideal.

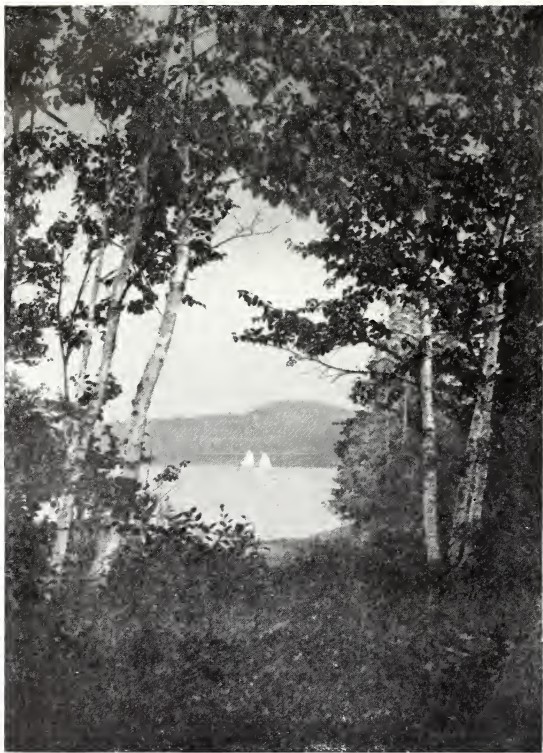
In pictorial work the use of a deep color-screen frequently destroys the atmospheric effect of haze in the distance which gives to some pictures their chief charm; yet, if sufficient exposure be given to obtain the proper values in the foreground, the action of the light upon the distant haze is so strong that it produces too great a contrast between those parts of the negative, foreshortening the distance and destroying the perspective. Persulphate overcomes this obstacle; for it enables development to be carried to that point where the foreground is built up without expense to the distance, produces a negative that may be printed without dodging and preserves the atmosphere at the same time.

It is possible that similar results may be

obtained by reduction with persulphate after the negative has been developed in the usual way; but I have never been able to produce the same effects by that method. Persulphate in the developer not only saves an extra operation, but precludes the risk of spoiling good negatives.

The only color-screen I have ever used is an old one made by John Carbutt. It is of a very pale shade of yellow and is, probably, not up to the standard of color-screens made to-day. A more deeply-tinted color-screen would, no doubt, give more impressive results; but I question whether, from a pictorial point of view, the effects would not be too greatly exaggerated.

Desiring to use my 4 x 5 Poco as a hand-camera, I had fitted to my 8 x 10 wide-angle lens an Ilex Universal shutter. As this lens is scaled to work at F/12.5, it would seem to be a little too slow for snapshots; but my instructions were to utilise the full possible aperture which the shutterman marked as F/9. This aperture



FRAMED IN BIRCH
CHARLES W. LONG





YELLOW BIRCHES

CHARLES W. LONG

gives a fairly sharp 4 x 5 image, ample for enlargement; but the lens is of too short a focus and of too great a depth of focus to use in pictorial work. With jack-knife and chisel, I made a front-board out of a cigar-box cover, which enabled me to use this lens and shutter in the large camera. But I employed it only in record or commercial work, sometimes for flashlight-groups in rooms where space is at a premium.

Only once have I used the $\frac{1}{10}$ second speed, which is the fastest speed of which the shutter is capable, and that was in the exposure of some surf-pictures, with the waves breaking close to the camera. The $\frac{1}{5}$ second and, rarely, the $\frac{1}{25}$ are the speeds I use most generally.

I sometimes consult my exposure-tables while in the field; but I never use the exposure that they advise. Usually, I double it—sometimes I multiply it by four, if I am not in a hurry. I am a leisurely sort of person and generally have

plenty of time at my disposal. I really think I would take a risk upon missing a train rather than deprive a deserving negative of a much-needed fraction of a second exposure.

I have tried several brands of plates during my most recent spasm of photographic relapse and have obtained the best results with the Eastman Portrait Film. Aside from their cel-like elusiveness, while being developed in a tray, they have a great deal to commend them in point of convenience, lightness and durability. The effects which it is possible to produce with them seem to be all that their makers claim.

I use them in the regular plateholder with inside-kits—5 x 7 in a 6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ holder—the kind that has a rabbit around all four edges of the opening. An old plate at the back, the same size as the film, keeps them perfectly flat.

Another simple contrivance I have made is gluing two strips of thin but stiff press-board

to the face of an old negative—a piece of flat cardboard would be lighter—the top strip being an eighth of an inch or so wider than the other and overlapping so as to form a sliding space under which the film is slipped. A stop is provided at one end, made in the same manner, but only about half an inch in length.

I have been trying to find a satisfactory printing-process; but, so far, have met with but indifferent success. The various gaslight-papers on the market to-day seem to be made to satisfy the requirements of the casual snapshooter type of camerist; but for pictorial work, few of those I have tried seem adequate. My unfamiliarity with the modern processes may have something to do with my lack of success; and, perhaps, my stock of patience is not so great as formerly.

So far, I have found nothing to compare with the old printing-out papers; but the only brands in this class that I find advertised are of the so-called self-toning varieties. These give fairly good sepia-tones; but the rich, warm blacks and purple-browns are lacking. Oh, for the snap and brilliancy of the old-time *Aristo-Platino*!

The present-day trend seems to be toward automatic processes and labor-saving devices, and this, of course, is as it should be. Perfection is always simplicity; but, simplicity of process at the sacrifice of quality merely makes for sloth and is a sop to laziness. I would rather achieve complete success through a little added effort than mediocre results after someone else has smoothed the road for me. By exercise we acquire strength; and the sunset-view is much more beautiful if we have climbed the hill to look at it.

I make very few records of my exposures, hence I am not able to give the complete data in all cases regarding the prints that accompany this article. Few of them received less than one-second exposure—some a great deal more. I shall give the exposures of which I have records and endeavor to come as near as possible to the others.

ACROSS CASTINE HARBOR.—Penobscot Bay in August; *Platyscope* F/16; bulb 2 seconds; color-screen; Portrait Film; pyro-persulphate development; Artura Carbon Green print. A very good example of extremes in lighting flattened

by the combination of color-screen, exposure and persulphate-development. To the eye the clouds appeared very much lighter than the blue-sky background. This is an absolutely straight print with no retouching, masking or any kind of "dodging."

THE YELLOW BIRCHES ABOVE ROSEGARDEN.—April, bright sunshine 3.30 P.M.; *Platyscope* F/8; quick bulb exposure without color-screen; Portrait Film; pyro-persulphate; Artura B print. The *shadows*—not reflections—on the water-surface and upon the tree-trunks are what attracted me toward making this view. Note the absence of halation against bright, blue sky.

FRAMED IN BIRCH.—Penobscot Bay in August; *Platyscope* F/16; no screen; about $\frac{1}{2}$ second; Hammer Red Label plate; pyro-persulphate; printed through two thicknesses of celluloid on Paget Self-Toning paper.

This picture is "framed" in more ways than one. The yawl is at anchor with sails only partly up, drying. I had set up my camera and arranged the composition and focus and was about to make the exposure, when I suddenly noticed that the sails had been lowered. I made the exposure anyway; but the Editor would refuse to print the somewhat forceful remarks I made upon the subject. It happened that I had made another exposure of the same boat from a different point of view, but at about the same distance; so in printing I simply borrowed the sails from the other picture, tracing them with opaque upon a sheet of celluloid.

A STERN AND ROCK-BOUND COAST.—Penobscot Bay in August; *Platyscope* F/8; color-screen; quick-bulb; intense sunlight, sun to the left and slightly in front of camera; Portrait Film; pyro-persulphate with three additional grains of persulphate and three more ounces of water. Artura B straight print, no masking.

The owl was shot by a boy and brought home very slightly wounded. The owl probably was not very much hurt, for he seemed lively enough, but apparently unable to fly. It was merely a case of "temporary shell-shock," no doubt, for later he made his way out of the shed where we kept him and disappeared. Print on Artura B.



Pinatypy

R. WAGNER



WITH the prices of all kinds of photographic products becoming dearer and dearer, substitutes and suggestions multiply in the technical publications for working more cheaply than before without at the same time allowing the artistic quality of the work to deteriorate.

But there seems to me to be one field that has been allowed to lie fallow that certainly deserves a little more attention, especially because it is one of the cheapest processes, and is besides very suitable for winter-work with its brief daylight, and that is pinatypy.

In the following lines we will pass briefly over the mode of working in order to gain perhaps a few friends; for while the process is simple, the result pays well. The pictures are very permanent, as they are made only with light-proof colors. First a few words about the colors necessary for pinatypy.

These colors are made at Höchst on the Main, in a large number of shades. They possess the property of not coloring hardened gelatine, while they color the unhardened quite strongly. Besides, the colors of the gelatine-coating are on a new support and may be transferred to paper also coated with gelatine, the two coatings being squeezed together while moist and allowed to remain so for a short time. The method of working is to prepare a so-called printing-plate, which is colored, and by squeezing a sheet of gelatinised paper on it a transfer of the picture is produced. From the printing-plate any desired number of copies may be made.

The formation of the picture on the printing-plate rests on the same fundamental idea as in carbon printing, viz., that chromated gelatine becomes hard when exposed to daylight.

The printing-plate is colored by immersing it in a dye-solution where the picture immediately becomes visible: on the portions that were exposed to the light the gelatine has lost its capacity for swelling and so has lost its power of absorbing the coloring-bath. A plate coated with chromated gelatine is therefore exposed under a glass *positive*; under the transparent portions the gelatine is hardened: in the covered parts no light can pass through and the gelatine remains capable of swelling and consequently of absorbing the color. In the halftones only a partial hardening takes place. A gelatine-coated plate exposed in this way will not take up any

of the color in the hardened parts, but in the unexposed parts it will absorb a great deal and in the halftones comparatively little of the color-liquid, thus producing a colored picture with all the corresponding gradations. From this it will be seen that the printing-plate, when exposed under a negative, will give a negative, but under a positive a positive copy.

One will now object that this reproduction of pictures will be both troublesome and especially expensive, as a diapositive must first be made; therefore, besides the original negative, a second plate is necessary. Well, even here one can work cheaply. For the diapositive one can use either negative-paper or make a carbon-diapositive. With negative-paper one has the advantage of being able easily to do any necessary retouching; on the other hand, the carbon-print can be used for projecting or as a window-transparency.

Preparation of the Printing-Plate.—In the preparation of a pinatype-picture the procedure is as follows: First the printing-plate must be prepared. To be sure, these are placed on the market by the Höchst Color-Works, but owing to the present high cost of glass they are rather expensive. It is much preferable to prepare one's own plates. For this purpose five grams (seventy-seven grains) of emulsion-gelatine is swelled for half an hour in cold water and is then slowly dissolved by warming, after which it is filtered.

Perfectly clean glass-plates (of old negatives) are laid on an exactly level support (a large glass-plate or something similar). On a 4 x 5 plate now pour forty-five minims of the gelatine-solution, spreading it evenly over the plate with a glass-rod. As soon as the gelatine has hardened sufficiently not to run, stand the plate in a perpendicular position to dry, which should take at most about twelve hours. This work is best done in a cool room so that the gelatine will dry as quickly as possible. The coating and drying, of course, must be done in a room free of dust.

The as yet unsensitised plates are immersed, in feeble daylight or by lamp-light, for about two minutes in a two-and-a-half per cent solution of ammonium or potassium bichromate, and are then dried in the dark, as when dry they are sensitive to the light. The exposure under the diapositive is best timed with a photometer. The sensitiveness is about the same as that of printing-out paper. A short exposure gives



A COLLEGE-GATEWAY

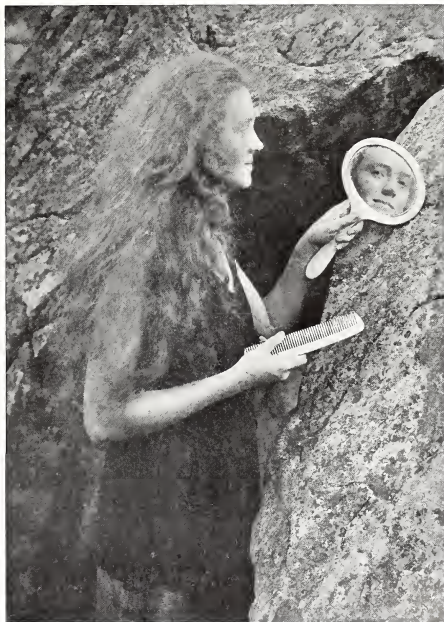
L. H. FLETMEYER

soft pictures; a long one harder pictures. After exposure, the plate is washed in water for about five minutes in order to remove superfluous chrome-salt. The picture must now show in flat relief.

Preparing Paper-Copies.—The plate, which is now no longer sensitive to light, may be colored at once in a wet condition, or it may first be fully dried. Half-dry plates and those on which there are still moist spots would be spotty on being colored. To prepare the coloring-bath dissolve from thirty to forty-five grains of the coloring-material in about three ounces of warm water. The solution may be hastened by stirring. This may be prepared beforehand, as it keeps indefinitely and can be used over and over again.

The plate to be colored is immersed in the bath and left for ten to fifteen minutes. It should be taken out from time to time, rinsed briskly and examined by transmitted light. The highlights should be perfectly clear and the shadows strongly covered. The superfluous color is removed by a short but vigorous rinsing.

Now a piece of gelatine-coated paper is soaked in cold water until it lies perfectly flat. The Höchst Color-Works prepares such paper under the name of "transfer-paper." The double-transfer paper used for carbon-printing may also be employed. The paper is now brought over the printing-plate while under water, coating to coating; it is then lifted out of the water, the superfluous water allowed to drip off and the paper is strongly squeezed to the plate as in carbon-printing, with a rubber-squeegee. Every air-bubble must be removed. If the paper slips to and fro while squeegeeing, it was soaked too long and in a little while wrinkles will form. The plate and paper are now laid paper-side down on a moist cloth or blotting-paper, to prevent drying, and are left so for ten or fifteen minutes. A corner of the paper may now be raised to see whether the print is sufficiently strong; and if not, the corner is squeegeed back securely and left for a short time longer. As soon as the print is dark enough, it is removed and the printing-plate may be again colored (from three to five minutes will be long



A MODERN LORELEI

DR. EDWARD F. BIGELOW

enough) and a new transfer made. This may be repeated as often as desired. The printing-plates last for years and therefore may be preserved for making later copies.

Finally the prints are hardened in the following solution:

Höchst Color-Works fixer.....	30 grains
Distilled water.....	3 ounces

Finally wash the prints briefly and dry them.

Some colors, as, for instance, sea-green, dark blue, purple, portrait brown and platinum black, change their color a little in the fixing-bath, so that by fixing various tones may be obtained.

Making Diapositives.—In making glass-pictures or diapositives proceed in the same way as given for preparing the printing-plate. These are used directly as glass-pictures. For coloring a thinner solution should be used than for the

paper transfers—say, one and one-half to two per cent. As soon as the plate has reached the necessary strength, it should be rinsed vigorously until the water runs from it clear. Too much washing weakens the color. It is then fixed the same as the paper-transfer.

To produce different shades of coloring from those sold by the trade, the plates may be bathed in different colors, by which means many different tones may be produced. It is better to bathe the plates in the different colors, one after the other, than to mix the colors together. It will also be noticed that in the light of the projecting-lamp the tones appear a little different from what they do by daylight; but by a little practice the correct tone is soon acquired. These pictures are especially fine on account of their clear lights and transparent colors.

I would here mention another possible way

for employing the pinatype-colors. As a negative is obtained from a negative picture, as already explained, pinatypy is particularly suitable for making duplicate negatives. Since the pinatype-plates work harder with long exposure and softer with short exposure, the duplicate negative may be made hard or soft as desired within comparatively wide limits. For color the best is platinum black. It should of course not be forgotten that the duplicate negative will have the sides reversed—a circumstance that is of advantage in carbon-printing.

Making Enlargements.—In making enlargements an enlarged positive is made from a small negative, on negative-paper, from which the printing-plate is prepared. Here also one saves the roundabout way with a small diapositive that is required by other methods, from which to make the enlargement. Otherwise the procedure is the same as already described.

A few other Uses of Pinatypy.—Besides the processes hereinbefore described, the pinatype-colors are very suitable for obtaining especially beautiful effects on glass-pictures in connection with chloro-bromide and carbon-diapositives. For example, a very light, uniform coloring of ordinary silver-bromide glass-pictures in a very dilute color-solution often increases greatly the picturesque effect. The cold white-and-black

of the picture can be very effectively toned with a quite dilute color.

Another possibility consists in adding a mirror-picture in pinatype-color to the covering-glass and fastening both together. It is quite easy to have this picture on the covering-glass hard or soft, strong or thin, as may appear most appropriate for projecting. Naturally the silver-picture must be made correspondingly thin or soft, as the pinatype picture produces a considerable strengthening of the contrasts.

Pinatype-colors are also very suitable for after-coloring (as well as at the same time strengthening) pigment-diapositives. The developed but unhardened picture, either wet or dry, is laid in the coloring-bath and the toning proceeds very quickly. As soon as it reaches the desired strength, rinse briefly and dry it.

In conclusion I would mention one more application for which pinatypy is specially suitable: views in natural colors, built upon the principle of three-color printing. The procedure in making the pictures is precisely as already described, except that three separate color-transfers are made on one paper. A further discussion of this process would lead us too far to give even the smallest experiment in the line of color-photography.

Photographische Rundschau.

What the Photographer Has to Put Up With

VANCE ARMSTRONG

A Monolog

THE LADY SPEAKS:



GOOD MORNING! Well, I didn't think I'd have the courage to come to-day after all! The fact is, I'd rather go to the dentist's than have my picture taken. You don't think it is as bad as that? Well, perhaps it isn't. But you know, positively I have been dreading it ever since I made the appointment with you. The fact is, I have never really had a satisfactory picture taken. You say that everyone thinks the same? Maybe he does; but I *know* that I always come out terribly,—so fat and frowsy looking, and some years older!

"Why, the last time I was photographed, I actually cried—cried, mind you—when the photographer sent home the proofs. So many lines! And so fat! Why is it that photographs make one look so much stouter? I showed them to my husband and he said they looked just like me.

He looked at me so queerly when I tore them up and put them in the fire. Aren't men strange? Why, I looked ten years older, and he said they were the image of me! They say that women dress only for men; but if my husband is anything like the rest of them, they're wasting their time!

"Is this where I am to sit? I'd like one standing too. I always come out so bunched looking when I sit. Yes, I like that background. Now don't take it till I'm ready! How far down are you going to take me? Oh, that far? Then the line of the skirt can't be good. Isn't it funny that men don't notice such things! There! I think that's better. I wonder if my hair is all right. Will you please let me have a hand-mirror? Yes; just as I supposed! Those back-hairs do show and they'd look awful in the picture. I suppose I shouldn't have washed my hair yesterday.



JEAN

A. R. HAZARD

"Now, I think I'm about ready! Turn my head a little? But really this is the best side of my face. You'll have to fix the lights? All right; but please hurry, because if I have to sit long all the expression leaves my face, and if there is anything I have, it is expression! Mobility is the word. That's what a friend of my husband's said—a friend of mine, too, of course. 'Mrs. Smythe-Tompkins,' he said, 'the point about your face is its mobility.' I thought it such a compliment. One tires so quickly of even a beautiful face if it has no expression, don't you think so?"

"There, I suppose you're ready now. Wait a second! Let me move my head a bit—it feels so stiff. There now. I suppose I'm giving you a lot of trouble, but I want to have you do yourself justice, you know, and I am sure I'll look awfully funny in the picture if my neck's cramped.

"Now, I think I'm just about ready. Will you—now? Oh, why didn't you take it then? I was feeling so natural, and I'm sure my expression was fine. I didn't suppose you'd have to look in the machine again if I changed my position. I am sorry. I'll try to remember next time. You have to raise the whole apparatus, too. All these mechanical things get on my nerves so. I think I'd feel better if I had some-

thing in my hands. No; I want a book. Yes; a fan will do. There! I think I'm just about ready. Is my dress all right now? Are you ready, too? I think—this is—about the expression! Now!

"Well, that's over! What? Dear me, you hadn't finished the exposure? But I heard something click, and I was sure you had taken it. I'm awfully sorry. I don't think I can get such a good expression again. I'm sorry you spoiled the plate, but it wasn't entirely my fault, was it? Oh, you're fiddling with that camera again! Dear me, it does make me nervous—all this fixing and pottering; but I suppose it has to be.

"I'll try to get the same expression again. I saw such a lovely picture of Norma Talmadge the other day, with her eyes like this, looking up. I'm sorry I didn't bring the band of velvet for the head, we might have got the same effect. However, it was like this, the pose, with my eyes turned—what, you don't think it suits me? Really my good man, sometimes the sitter is a better judge of those things than the photographer. Of course, I know I am not so young as some of these movie-stars; but my face has more—well, at any rate, all my friends think so. Well, I suppose we ought to stop talking. And you really haven't taken one picture yet; have you? How slow photographers are!"



THE WETTERHORN

WILFRED A. FRENCH



EDITORIAL



Tourist-Photography

THE number of hand-cameras of every convenient size and of nearly every known type that are sold annually to tourists is enormous. Whether a person desires to visit our national parks, the Canadian Rockies, the Flowery Kingdom, or some European country, he generally provides himself with a hand-camera of small dimensions and a number of roll-films, and, on his way to the country he intends to visit, has visions of attractive mementos—he hopes to obtain—of the many objects of interest. In most cases of this kind, the owner of the newly acquired camera has no photographic knowledge, whatever, except the brief directions for manipulating the equipment given him by the salesman, or derived from the little instruction-book supplied with the camera. If the instructions are followed faithfully, and the photographic conditions are favorable, the tourist's efforts may be crowned with success, provided, of course, that the exposed films be developed speedily and by a conscientious expert, unless preserved in hermetically sealed cans and photo-finished after his return home. Even so, the tourist-camerist may not be entirely satisfied with his personally-made photographs, particularly if compared with the superb picture-postcards of the same subjects procured abroad. The viewpoint and perspective of his own photographs often leave much to be desired and, if he is at all critical, he may—as has been done by others—discard them in favor of the popular picture-postcards. Attractive and interesting as these are, however, they are only indirectly associated with the pleasure experienced by the tourist when he first beheld the original scene; whereas, foreign postcards purchased or acquired in this country, after his return home, are devoid of any sentiment, whatsoever.

Then, again, it often happens that the tourist has the misfortune to lose most of his exposures through careless use of the camera; but, confident in his ability to obtain successful results, he disregarded the attractive pictorial postcard so eagerly purchased by nearly every tourist. This course he may have reason to regret, if his results are disappointing, and all he has to show for his pains are underexposures, double-exposures, blanks, buildings and towers out of plumb, waterlines askew, obscured mountain-views, bewildering

street-scenes, out-of-focus effects—in fact, nearly every fault characteristic of the ignorant or careless camera-user. After this resultant disappointment and mortification, the tourist must profoundly wish that he had learned the mastery of his equipment before he embarked on his journey.

It is sincerely hoped that every reader of this—one of innumerable instances of shattered hopes—will explain to his friends and acquaintances, who contemplate a foreign journey with a camera, the importance—yes, the necessity of a series of practical lessons in photography. “Even though I can't speak a single word in a foreign language, I'll get along, somehow,” is the remark of the average American who sets out on a trip abroad. When he returns home, he feels that a timely course in this or that language under an able teacher would have been a great help to him. This idea applies also to photography, only with greater force. The prospective traveler who intends to make pictures in a far-away country, should devote at least two months to practical training under a competent photographer—professional or amateur. From him he will learn not only how to master his camera, in every particular, but how to obtain results that are satisfactory from a technical and artistic viewpoint. He will also be taught to understand the difference between good and bad weather-conditions, and that it is sometimes better not to make a picture, at all, than to risk complete failure and to waste film that could be used to better advantage. After all, the object of the tourist-camerist is to obtain a series of personally-made photographs that shall be to himself and friends a permanent source of interest; hence, he will be more than repaid for the cost of preparatory lessons in practical photography.

Another feature of successful tourist-photography is that, after his return home, the camerist may be encouraged to resume picture-making, and develop into a full-fledged amateur-photographer. He needs but to join a flourishing camera-club to reap all the enjoyment and benefit of his newly-acquired hobby. There, he may engage in the fascinating work of personally photographing his exposed plates; for each member, as a true amateur-photographer, is expected to be technically proficient and to dispense altogether with professional aid.



ADVANCED COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Advanced Competition
Wolfeboro, New Hampshire, U.S.A.



Prizes

First Prize: Value \$10.00.
Second Prize: Value \$5.00.
Third Prize: Value \$2.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Prizes may be chosen by the winner, and will be awarded in photographic materials sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE or in books. If preferred, the winner of a first prize may have a solid silver cup, of artistic design, suitably engraved.



Rules

1. This competition is free and open to photographers of ability and in good standing—amateur or professional.

2. **No more than two subjects may be entered, but they must represent, throughout, the personal, unaided work of competitors. Remember that subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface and sepias are not suitable for reproduction, and should be accompanied by smooth prints having the same gradations and detail. All prints should be mounted on stiff boards.

3. *Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces or fraction is sent with the data.*

4. Each print entered must bear the maker's name and address, the title of the picture and name and month of competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for a 2-cent stamp. **Be sure to state on the back of every print exactly for what competition it is intended.**

5. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, this does not prevent the photographer from disposing of other prints from such negatives after he shall have received official recognition.

6. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins; but in every case, prints should be protected by strong, stiff boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

7. Competitors who have won three first prizes within a twelve-month, become ineligible for two years thereafter. The too frequent capture of the first prize by one and the same competitor tends to discourage other participants and to make the competitions appear one-sided and monotonous.

Awards—Copying Works of Art Closed March 31, 1921

First Prize: Warren R. Laity.
Second Prize: L. A. Olsen.

Third Prize: Helmut Kroening.

Honorable Mention: George A. Beane, Lewis Benthel, Jr., B. Botel, Alvah Clark, Fred Genscher, Harold Gray, J. Kirkland Hodges, Louis R. Murray, Robert P. Nute, Henry A. Stanley, E. Von Tilzor Struthers.

Subjects for Competition—1921

"Winter-Sports." Closes January 31.
"Home-Portraits." Closes February 28.
"Copying Works of Art." Closes March 31.
(Paintings and Statuary.)
"Home-Scenes" (Interior). Closes April 30.
"Street-Scenes." Closes May 31.
"Summer-Sports." Closes June 30
"Summer-Flowers." Closes July 31.
"Marines." Closes August 31.
"Outdoor-Genres." Closes September 30.
"Architectural Subjects." Closes October 31.
"Domestic Pets." Closes November 30.
"Indoor-Genres." Closes December 31.



Photo-Era Prize-Cup

In deference to the wishes of prize-winners, the Publisher will give them the choice of photographic supplies to the full amount of the First Prize (\$10.00), or a solid silver cup, of artistic and original design, suitably inscribed, as shown in the accompanying illustration.



Competitors Should Mind the Rules

COMPETITORS, in the Advanced Workers' and Beginners' Competitions, are inclined to ignore some of the rules, one of which is that the name and address of sender, also name, month and kind of competition must be written plainly on the back of each print. Otherwise, how is the jury to know?

This is often the reason why careless entrants wonder what has become of their prints. Let them be more careful in the future. We will do our part, gladly.

We are eager to make these competitions of practical value and benefit to every entrant. However, to serve each one to the best of our ability, we must have the necessary information.



MADONNA DE LORETO

WARREN R. LAITY

FIRST PRIZE—COPYING WORKS OF ART

The Study of Lighting

THE novice in portraiture can be excused for feeling somewhat bewildered when he visits an exhibition of modern photographs in the hope of learning something about the art of lighting the human subject, remarks *The British Journal*. Usually, he will find such a variety of treatment that he will be led to the opinion that lighting is almost a matter of chance, and that what he had best do is to expose his plates under almost any conditions and trust to luck for the result. Such a conclusion would, however, prove fatal to his own prospects of turning out consistently good work, for though he might occasionally "fluke" a success, the lack of knowledge would prevent him from repeating it with such modifications as would be necessary with another sitter. Therefore, the beginner must learn to control his light. He must start on the simplest styles, and when these are mastered attempt those which are more ambitious.

Although servile copying of a style, whether it be that of a photographer or a painter, is to be deprecated in work which is to be shown to the public, it is invaluable to the student, whom we strongly advise to pro-

cure such portraits as appeal to his taste. Selecting as sitters such of his friends as have some resemblance to the originals, let him endeavor to produce something as nearly approaching his model-photographs as possible. It is not to be expected that success will attend the first effort, but repeated attempts should be made until a near approximation is arrived at. Some of these attempts may appear more pleasing to the photographer than the original model, but they must be laid aside until the purpose aimed at, that of reproducing a particular effect, has been achieved. Such practice with various styles of lighting will rapidly bring a confidence and facility in working which could not be attained by years of unsystematic work.

To come to practical details of lighting, it should, in the first place, be understood that, provided a sufficient volume of light is available and can be made to fall upon the sitter at any desired angle, the actual design of the studio is of little consequence; moreover, that any effects obtainable by daylight can be equally well obtained by an efficient electric installation. Apart from the direction of the light, one of the most important factors is the distance between the light and the sitter, the lighting becoming softer the farther the sitter re-



MUSE WEeping OVER HEAD OF ORPHEUS

L. A. OLSEN

cedes from the light. This is most apparent with a light of small area, such as a single enclosed arc-lamp—of course, properly screened—but it can easily be demonstrated with daylight—care being taken that the angle of the light is not altered—by placing the sitter at distances of four and seven feet from the light-side of the studio, and if possible making negatives at both positions. It may be useful to point out that the eye requires a good deal of training to appreciate variations in lighting, as it is necessary to ignore the effect of color; negatives, being monochromatic, give a safer basis for comparison. A bust painted gray or buff is useful for experiments in lighting, or green or blue spectacles may be used to eliminate the color-factor. For the same reason, it is not desirable to judge of lighting by inspection of the camera-screen, since the effect, owing to the reduced size and the presence of color, appears satisfactory in almost all cases.

Comparatively few photographers appreciate the value of translucent and semi-opaque screens which are used close up to the sitter. Many lighting-problems which are extremely difficult of solution if the ordinary blinds are available, are very simple if local shading can be done. A couple of ordinary head-screens, one

covered with butter-muslin and the other with a thin dark material, should always be at hand; the latter is particularly useful to reduce the light on white drapery or to throw the hands into semi-shadow.

Reflectors should be used sparingly, and should be introduced only to obtain such effects as cannot be produced by direct lighting. This does not, of course, apply when the reflector is used as the principal source of light, as when the light of an arc-lamp is directed upon a white screen, no direct rays reaching the sitter. In most studios, white reflectors are *de rigueur*, and some careful portrait-photographers whiten them frequently. At the same time we suggest the occasional use of a light-gray reflector, which, while it softens the shadows, does not betray its use, and is certainly less likely to give cross-lights in the eyes. Another point in using reflectors is worth noting. If they are brought forward there is a tendency to destroy all the modeling on the shadow-side of the face, but if kept well back, so that the front edge is level with the sitter's ear, there will be no risk of double lights in the eyes, and the delicate shadows in the face will be preserved.

One more hint. When arranging for strong effects in lighting, it is desirable to admit a fair amount of

THIRD PRIZE
COPYING WORKS OF ART



By Special Permission of Minneapolis Institute of Arts

LITTLE FRENCH GIRL

HELMUT KROENING

light at the farther end of the studio. This illuminates the whole subject with a very subdued light, which is much to be preferred to reflected light, from the small source of light which is actually producing the picture.

Economy in Using Flashpowder

EDITOR OF PHOTO-ERA MAGAZINE:

With flashpowder one dollar or more an ounce, the cost of the light may become quite an item in our picture-bill. Where extremely large gatherings are attempted, or where Autochrome portraits are made with an F/8 lens, a single charge of powder will tip the scales at pretty nearly one ounce. This brings the cost of the powder to considerably more than the cost of even an Autochrome-plate.

A considerable saving may be effected where more than one exposure is desired, by setting up two or more cameras on the subject, thus securing several plates with a single flash. With ordinary plates, the cost of this extra precaution is negligible in comparison with the cost of a heavy charge of powder. And with Autochromes, there is increased certainty of satisfactory results, as even with identical exposures widely different results may be obtained by slight differences

in the time of development. The development of the first plate may be a valuable guide to obtaining improved results on the second.

When exposing Autochrome-plates, remember that it is necessary to use a Perchlora filter in every camera used; but at seventy-five cents or a dollar a flash, this extra expense is soon transferred to the profit-side of the account.

Needless to say, the extra cameras employed may be of very diverse types and equipment. In fact, a vest-pocket-outfit may astonish you by giving a better result than the more pretentious tripod-camera upon which you have learned to rely.

A black and white negative may be obtained by the same flash you use with an Autochrome, if you set the indicator for your smallest stop.

WINN W. DAVIDSON.

A Conundrum

WHILE watching a motion-picture of the Isle of Wight, recently, an old English conundrum was recalled to our mind. It ran thus: Why is the Isle of Wight a fraud? Because it has Needles you cannot thread; Freshwater you cannot drink; Cows you cannot milk, and Newport you cannot bottle.



SUBJECT FOR NEXT COMPETITION
ADVANCED WORKERS



AMERICAN DAISIES

H. R. DECKER

EXAMPLE OF INTERPRETATION

Advanced Competition—Summer-Flowers
Closes July 31, 1921

THE beauty of flowers has been the theme of artists and poets for centuries. Why, then, should they not appeal to the photographer? Certainly, there are few subjects that lend themselves better to artistic composition or design. Moreover, during the summer-months there is material at every hand—even in one's own garden or the city-park. Really, the worker cannot say truthfully that he is unable to find attractive subjects. An added fascination is that flower-photography is not so easy as it may appear—not that it presents exceptional technical difficulties, but that it

requires careful attention to exposure, focusing and the correct use of a color-screen. Those who have an intelligent grasp of orthochromatic photography, and a thorough acquaintance with color-sensitive plates and films, will be the better able to obtain the rendering of true color-values in the many varieties of summer-flowers.

In a sense, the type of camera is of less importance than in other branches of photography. Obviously, no great lens- or shutter-speed is required. Neither is a camera with a long bellows-extension necessary. The modern portrait-attachment that is slipped on over the camera-lens is sufficient, in most cases, to enable the worker to obtain excellent results. Box-form outfits

may sometimes be used as successfully as the most expensive high-grade equipment. Pictures of flowers may be made in the house or out of doors. However, true photographic sportsmanship should impel the worker to make his pictures of summer-flowers in the fields, woods or shady glen. The jury will be inclined to give the preference of selection to those photographers who have overcome the technical difficulties involved in the making of exterior flower-studies. Then again, contestants should remember that it is *summer-flowers* that are to be photographed and not greenhouse-specimens, no matter how beautiful they may be.

Whether a man uses a camera or a box of paints, to express the art within him, he usually turns to nature for his truest and highest inspiration. In this competition the grandeur of snow-capped peaks is to give place to a more intimate, yet none the less beautiful, study of flowers. Participants are asked to pick out individual specimens and to portray these truthfully, artistically and in their native environment. The beautiful flower-studies by Kenneth Hartley illustrate convincingly what may be done by the intelligent camerist. I advise every prospective entrant in this competition to read carefully the article, "The Wild-Flowers of Pike's Peak," by Kenneth Hartley in June, 1915, PHOTO-ERA MAGAZINE. It will be a source of much practical help and splendid inspiration.

Although I have mentioned briefly the technical equipment that is suited to the making of flower-studies, I have said nothing of the need of artistic and mental preparation. In my article, "Voices of Nature and The Camera," page 150, of March, 1919, PHOTO-ERA MAGAZINE, I called attention to the experience of a young lady who had "eyes but she saw not, and ears but she heard not" during a visit she paid my family while we were in a beautiful spot in the Berkshire Hills. How her love of nature was aroused and what it meant to her for years afterward, illustrates my point that to photograph Nature we must love her. By that, I do not mean a superficial love that finds expression in trite remarks such as "isn't that a grand flower"; "what a pretty mountain"; "look at that funny bird"; "my, what a gorgeous toadstool" and similar remarks. To love nature, as the true artist of the brush or camera should love her, is to "find tongues in trees, books in the running brooks, sermons in stones and good in everything."

In this love of nature must be included a feeling of kinship with our furred and feathered friends and the flowers. They must be made to feel the warmth and genuineness of that love. Men like Thoreau, Burroughs, Muir and Van Dyke may be said to have loved nature deeply, and for that reason they were able to bring to thousands a realisation of the beauties of field and forest and the life within them. It has been said that nature never disappoints those who turn to her, and I know this to be true.

The photography of summer-flowers is often as much of a test of the worker's ingenuity as it is of his technical and artistic abilities. Some fine *contre-jour* effects may be obtained when the strong sunlight strikes the translucent-petals of a wild-rose or a wood-lily. Perhaps, no subject is more irritating to photograph than a long-stemmed flower, such as the Tiger-Lily, when the specimen happens to be situated in a large, wind-swept field. Usually, the use of a color-screen precludes an instantaneous exposure and the camerist may become hard put to keep "that flower quiet" long enough to make a picture. Obviously, the attempt should not be made if a high wind is blowing; but let us assume that there is a gentle breeze sufficient to keep the flower waving to and fro on

its long stem. In the circumstances, the worker will be called upon to show his resourcefulness by making some sort of a windbreak. To add to his dilemma, such a protection may upset the photographer's effort to obtain a satisfactory background. Two or three wooden stakes and a yard or two of some white or slightly colored material will sometimes serve as a combined windbreak and background. But, here again, there is the possibility of making the finished picture appear too artificial or as if it had been made indoors. In this competition, the aim should be to make the flower appear as if it had been photographed in the open, and untouched by human hands. The result to strive for is the one that displays the beauty of the subject amid its natural environment; and it is just this that differentiates the work of Kenneth Hartley and other specialists from that of many nature-photographers. The photography of summer-flowers is not beyond the average worker who approaches the subject intelligently. Because certain workers make such a success of this branch of photography, others should remember that the reason for this very success is not due always to superior equipment nor to greater ability, but rather to the determination to master the subject by care, thought and patience.

In a sense, this competition offers a combined photographic and botanical excursion. Certain flowers will make a greater appeal than others, and this may occasion a journey afield into the secluded nook of the orchid or the deep woods where the Indian Pipe secludes itself. Then, again, there are the flowers that nestle along the banks of streams or on the shores of ponds and lakes. As for a large, open field—days may be spent in photographing the wild flowers of the field that "toil not, neither do they spin," but "Solomon in all his glory was not arrayed like one of these."

Incidentally, the worker—especially if he happens to be an artist—will derive much benefit from a study of the manner with which Nature arranges her color-schemes so that each flower is a master-stroke of coloration. Then again, nature is well worth studying with regard to composition. It has been said that Nature is not always to be depended upon to show her charms to the best advantage; but then, there is much that we can learn. If nothing more, we can use our eyes and ears to enjoy the great out of doors; and that is a never-failing source of mental and physical rejuvenation.

Moreover, the photography of summer-flowers is convincing evidence that the camera is often a means to bring a busy man or woman to the realisation that there are such things as blue sky, birds, placid streams, beautiful lakes, magnificent cloud-effects, mountains, meadow-lands, green pastures and flowers. How many of us who have lived in the city have reached a point of apathy where we hardly noted the seasons of the year. However, in photography we have the opportunity and the incentive to seek the deeper, truer things of life.

Thus, it may be seen that although this is a photographic competition devoted to summer-flowers, it has far-reaching opportunities. We hope that readers and subscribers will catch a glimpse of these possibilities photographically and otherwise. After all, photography is but a chemical means to help us express pictorially that which we cannot say in words. A verbal description of a beautiful flower has neither the force nor the permanency of a picture. Let us aim to make these photographs of summer-flowers so convincing, well composed, beautiful and appealing that they shall live to be a delight to all who may be privileged to behold them, now and for years to come.

A. H. B.



BEGINNERS' COMPETITION

Closing the last day of every month
Address all prints to PHOTO-ERA MAGAZINE, Beginners' Competition
Wolfeboro, New Hampshire, U. S. A.



Prizes

First Prize: Value, \$2.50.

Second Prize: Value, \$1.50.

Honorable Mention: Those whose work is deemed worthy of reproduction with the prize-winning pictures, or in later issues, will be given Honorable Mention.

Subject for each contest is "**Miscellaneous**"; but original themes are preferred.

Prizes, chosen by the winner, will be awarded in photographic materials, sold by any dealer or manufacturer who advertises in PHOTO-ERA MAGAZINE, or in books.

Rules

1. This competition is open only to beginners of not more than **two** years' practical camera-activity, and whose work submitted here, is **without any practical help from friend or professional expert**. A signed statement to this effect should accompany the data.

2. Workers are eligible so long as they have not won a first prize in this competition. Winners of the first prize automatically drop out permanently, but may enter prints in the Advanced Class at any time.

3. Prints eligible are contact-prints from $2\frac{1}{4} \times 3\frac{1}{4}$ to and including $3\frac{1}{4} \times 5\frac{1}{2}$ inches, and enlargements up to and including 8×10 inches.

4. Prints representing **no more than two different subjects**, for any one competition, and printed in any medium except blue-print, may be entered. They should be simply and tastefully mounted. **Subjects which have appeared in other publications are not eligible, nor may duplicate prints be sold, or entered in competition elsewhere, before Photo-Era Magazine awards are announced.** Prints on rough or linen-finish surface paper and sepias are not suitable for reproduction, and should be accompanied by smooth prints that have the same gradations and detail.

5. **Unsuccessful prints will be returned only when return-postage at the rate of one cent for each two ounces of fraction is sent with the data. Criticism at request.**

6. Prints receiving prizes or Honorable Mention become the property of PHOTO-ERA MAGAZINE, unless otherwise requested by the contestant. However, he may dispose of other prints from such negatives after he shall have received official recognition.

7. Each print entered must bear the maker's name, address, instructions, the title of the picture and the name and month of the competition, and should be accompanied by a letter, SENT SEPARATELY, giving full particulars of date, light, plate or film, make, type, and focus of lens, stop used, exposure, developer and printing-process. Enclose return-postage in this letter. Data-blanks sent for 2-cent stamp. **Be sure to state on the back of every print for what contest it is intended.**

8. On account of the present high prices of paper and cardboard, competitors may send large prints mounted with narrow margins, but in every case, prints should be protected by strong, **stiff** boards, or of a kind that bends slightly without breaking. Large packages may be sent by express (prepaid).

Awards—Beginners' Competition

Closed March 31, 1921

First Prize: None awarded.

Second Prize: John J. Griffiths.

Special Commendation: Carl S. Davis.

The Beginner and the Soft-Focus Lens

THE popularity of the soft-focus lens, once confined to the professional or advanced amateur photographer, is now arousing the interest of beginners to such an extent that a word on the subject may be of service. Without a doubt, the soft-focus lens has come to stay. By its intelligent use, the worker can obtain effects that cannot be had in any other way without manipulation of a character too technical for the average beginner to attempt. The earlier types of soft-focus lenses were so constructed that even the professional photographer was compelled to make a special study of its use; but to-day such strides have been made by several manufacturers, that a soft-focus lens requires no more study than a high-grade anastigmat in order to obtain results. Of course, whether these results meet the individual requirements of the camerist is a question that he alone can determine.

Paradoxical as it may seem, a soft-focus lens requires careful focusing. That is, there is a point where the "softness" or diffusion reaches its most pleasing effect without becoming too "fuzzy" or positively out of focus in appearance. When soft-focus lenses were first placed upon the market, many photographers were unable to understand why they could not obtain the same effect by simply putting their anastigmat lenses slightly out of focus. At first glance, it might appear to the novice that there was no difference; but subsequent study and critical inspection revealed the fact that a soft-focus lens produced a roundness and atmospheric quality that was not paralleled by the "out-of-focus" anastigmat. Naturally, there was then, and is now, considerable discussion with regard to this point; but the fact remains that the soft-focus lens has come to make a long stay and we shall have to accept it as an important link in the chain of photographic apparatus upon which we depend to help us express ourselves pictorially.

Sometimes, it may be said that the beginner enters photography "where angels fear to tread." In the opinion of those of ripe photographic experience, to give a beginner a soft-focus lens might be likened to giving a stick of dynamite to a child. However, those of long experience notwithstanding, there are many beginners who have been successful with a soft-focus lens before being able to make a clear-cut picture with an anastigmat lens. Personally, it would seem to me that any beginner should master a rapid rectilinear or anastigmat lens before he attempts to use a soft-focus lens. In my opinion, he requires the technical experience and preparation that he receives by mastering "sharp" lenses; but to say that it is impossible for a beginner to use a soft-focus lens successfully until he can use an anastigmat lens, is to court contradiction.



A SHADY BROOK

JOHN J. GRIFFITHS

SECOND PRIZE — BEGINNERS' COMPETITION

Hence, I would not care to go on record as saying that it cannot be done; but should anyone ask my opinion, I should favor the mastery of the "sharp" lens first.

Without a doubt, the soft-focus lens is ideally adapted to the requirements of the beginner who yearns to express himself in an original manner. But here let me ask how he is to know what he does or does not want unless he has had prior experience with other lenses? Let us assume that a beginner is given a new camera fitted with a soft-focus lens. How is he to apply the rules and suggestions of his instruction-book? From the moment that he makes the first exposure, he is working along lines that are not covered by the one book that is of greatest service to him in his tyro-days. Mind, I am not saying that it cannot be done; but it seems to me that the average beginner has troubles enough without inviting them. Let us assume once more that he does make excellent pictures and becomes master of his equipment. What is he to do when he wishes to use an outfit equipped with a good anastigmat lens?

My reason for mentioning soft-focus lenses, at this time, is with the desire to be of some service to those of our readers who may be contemplating an entrance into photography via the soft-focus-lens route. By all means, enter photography; but remember that it is the successful beginner that gets the most out of photography. Although we endorse and would promote the use of the soft-focus lens, we would not care to do so in cases where it might result in the beginner becoming discouraged and giving up photography altogether—to the direct loss of all concerned.

In conclusion, it will be well for the beginner to study the soft-focus lens and to use one *after* he has been graduated up to it by thorough work and the mastery of "sharp" lenses. He will enjoy the soft-

focus lens, and he may do better with it than he thinks; but first let him be a master of photographic rudiments. It will pay him a thousandfold in the end. A. H. B.

Be Prepared Photographically

A RECENT experience of a friend of mine leads me to add just a word of suggestion for the benefit of those beginners who are thinking of vacation-days. An exceptional opportunity to spend a few days in the Adirondack Mountains happened to come my friend's way and he accepted eagerly. Of course, he must take along his camera. This was a 5 x 7 plate-camera, fitted with an anastigmat lens. Owing to his rather hurried departure he did not take an extra few moments to see just what he included in his photographic outfit. He *thought* that he had everything that was needed.

To make a long story short, on the first day in the mountains he broke the groundglass—he had forgotten an extra one! On the third day he virtually exhausted the supply of plates. He telephoned to the nearest source of supply. There were plenty of 5 x 7 *film-packs* but no plates in stock—he had forgotten his 5 x 7 film-pack-adaptor! A magnificent sunset on the fifth day was simply dazzling in its beauty because of the cloud-effects—he had forgotten a color-screen! Last, but not least, in carrying the camera with the bellows extended, through the woods, a thorn on a bush caught a corner of the bellows and tore a hole nearly two inches long—he had forgotten adhesive plaster and a little piece of black cloth!

Let the beginner take this little story to heart. Let him take the time to prepare carefully and thus avoid the possibility of keen disappointment.

A. H. B.



VOILAND ROAD-SCENE

CARL S. DAVIS

A Few Photographic "Kinks"

EDITOR PHOTO-ERA MAGAZINE:

Have noticed that the "Thrift Column" ceased to be a characteristic of the Magazine. A cause for regret, because it was entertaining, and the hints suggested were valuable during the War when "Thrift" should have been the watchword of the hour.

I give below a few "kinks" which may be appreciated by fellow-amateurs, "who photograph for their own amazement."

Fake photographs are seldom articles of real value; but for the sake of amusement alone, they are worth while. Freak photos can be gotten by the use of various supplementary lenses on the market; but by a little experimenting we can obtain effects that even surprise ourselves.

Our "warmest" summer-negatives can be made into snow-scenes that are mysterious for the reason that the trees are filled with leaves, by the addition of a few drops of bromide in the developer, while developing a slightly underexposed print.

Other interesting experiments may be made, with no additional equipment than the ordinary chemicals which we use almost every day, and intelligent use of the printing-frame.

I saw a few prints lately that were produced from

slightly underexposed prints, which have the appearance of pictures made on a very frosty morning. The bluish color that they were toned added to the "chilly" aspect of "frosty morning." The negatives were made on a clear summer-morning, near a small stream; but the result of careless printing, gave some beautiful prints, even though the method used was not according to "The X. Y. Z. of Photography." The average person would pronounce them creditable scenes of the "First Frost," as the owner has them designated.

Clouds, in a photograph without the use of an extra lens, can be gotten by making a slow time-exposure and by using a small stop proceed as follows: On the groundglass, or finder, notice how much of the picture will be allotted to clouds. Use a piece of card, or anything similar that is handy, and pass it over the upper half, or third of the lens—according to the part of plate exposed for the sky—in a near-to-far motion. A few trials will suffice to give the "knack" of it, though it is entirely out of question, of course, where there are moving objects.

A reading-glass is useful as a supplementary lens, in increasing the size of the image on the plate, when copying. A small stop is suggested, to increase the covering-power, as its use causes lines on the edges to curve slightly.

W. P. MATTERN.



THE CRUCIBLE

A MONTHLY DIGEST OF PHOTO-TECHNICAL FACTS

Edited by A. H. BEARDSLEY



Time of Exposure in Microphotography

PHOTOGRAPHY with the camera alone demands considerable experience and long practice to be able to judge correctly the time of exposure. In the practice of microphotography, this is the case to a much greater degree, and, indeed, the factor that is easiest to estimate in an ordinary exposure, viz., the relation of the lens-opening, becomes the most difficult to decide. Thus it comes, that it is often recommended to determine the time of exposure entirely by the psychologic impression received from the clearness of the image on the groundglass. Such a practice, however, cannot ensure a correct result.

In landscape-photography, the time of exposure varies chiefly on account of the extreme variations in the intensity of the daylight, and in a secondary degree owing to the nature of the object. In microphotography, against the first, the constancy of the source of light is counted as a great advantage. In regard to the nature of the object, it may be said that the transparency of the mounting-preparation does not vary very greatly. One can always expose correctly if the time of exposure for a thin adhesive preparation in like conditions is known. Regarding the varying degree of sensitiveness of different makes of plates I will say nothing, as different kinds of plates should very rarely be used together.

There remains, then, the relative opening to regulate—in landscape-photography the quotient of the focal distance and the diameter of the diaphragm, in microphotography the quotient of the bellows-extension (which may be chosen at pleasure) and the diameter of the exit-pupil of the microscope. This lies as the real picture of the entering opening a few millimeters above the ocular lens, and its size depends upon: 1. the diameter of the diaphragm of the condenser; 2. the focal length of condenser; 3. the focal length of the objective; 4. the focal length of the ocular; and 5. the length of the tube, which, however, may remain nearly constant, if a strong, dry system with correction-mountings be used. If one should wish to reckon the size of the exit-pupil from the first four factors, one should have at hand a rather ponderous collection of tables, and in order to be able to measure them directly, a special lens with a vernier-plate, as the ordinary micrometer eyepieces are (according to the distance away of the collective glass) generally inutilizable, as its object-plane cannot be brought sufficiently near to the exit-pupil.

One can now help himself by measuring the entrance-pupil with an auxiliary microscope and measuring-eyeglass, and the scale is read off in parts. The exit-pupil is now measured in millimeters for an eyeglass and the computation-factor is determined by division. For this purpose, an ocular is selected in which the computation-factor produces a convenient size. So I found for one of my oculars the factor 0.01—therefore, reasonably favorable. This ocular will hereafter be designated as *base-ocular*.

An auxiliary microscope, such as Zeiss makes for the Abbe diffraction-apparatus, will be owned by almost every one, but one can be easily improvised by

removing the eyeglass from the weakest Huygens ocular and then sliding the auxiliary with the collective forward in the inner tube, where it will stop at the diaphragm that closes this tube. This collective serves as objective of the auxiliary microscope, as the ocular of a measuring-lens. The focusing on the entrance-pupil is done by sliding the telescoping tube.

This simple manipulation is done before making the exposure, the reading is multiplied by the computation-factor of the base-ocular and by this is obtained the size of the exit-pupil in millimeters. The relative opening is obtained from a table which contains the bellows-extension (200, 300 or 400 millimeters) and the exit-pupil (about 0.3—1.0 mm.). The time of exposure must now be computed carefully for a relative opening with normal filter, normal light-source and a thin mounting-preparation, and after that the time for the other relative openings is entered in a table (for instance: 200, 4 seconds; 400, 16 seconds; 1000, 1 min. 40 seconds).

If one wishes to photograph with a different lens from the base-ocular for which the relative opening was calculated, the commutation-value for the time of exposure of the other ocular is determined with reference to the base-ocular. It bears the same proportion as the square of the equivalent focal distance, and this again as the dimension of the enlargement.

If, for example, the base-ocular = 60 x enlargement, another ocular x with the same objective but with 150 x enlargement, so the factor of commutation for the ocular x equals four and the exposure must be four times as long as given by the table for the base-ocular.

This formula may appear somewhat complicated; but it permits, when the exposure-time has been tried out, to be determined beforehand for any desired combination of objective, ocular or bellows-extension—an advantage surely not to be underrated. Naturally, one is still dependent upon the kind of radiation of the source of light for the condenser and, to a high degree, of the color-filter. The method can be used only for clear-field pictures.—*Photographische Mitteilungen*.

A Valuable Hint

PHOTO-ERA MAGAZINE: For the past year, I have tried a little practical reading that is both interesting and valuable in furnishing information as well, and keeping my photographic knowledge in fair condition.

Copies of PHOTO-ERA MAGAZINE are placed in a handy place on the upper part of my desk, and each month for the past several years are taken from the files and placed where my daily reading-matter is kept. By reading, for instance, January 1920, and comparing same with January issues 1919—1918—1917 and so on, I get information that is practical for this particular month, and it is like one great big magazine-issue. Even though I have read these same articles when they appeared, yet they seem fresh articles and are read more interestingly and with more clearness, brushing up on some points here and there; and some articles not read are just what we need now. Try this plan for one year and you will not depart from it.

LOUIS R. MURRAY.



OUR CONTRIBUTING CRITICS



YOUR CRITICISM IS INVITED

Whoever sends the best criticism (not over 150 words) before the twentieth of the current month, will receive from us a three-month subscription to PHOTO-ERA MAGAZINE.

The winning criticism, in our opinion, is the first one printed below. Criticism should be helpful and courteous.

In composition this picture has that all too common fault—too perfect a balance. There is possibly too hairbreadths more of space to the right of the pretty tree than there is to the left of it; but certainly not more. Besides that, the tree just misses growing off the upper edge. The ghost-branches at the right add neither beauty nor interest. As for the blank white rectangle, that is so glaring a fault, that little need be said about it. If there were anything from which it could detract the attention, it would certainly do so; but as it is, it merely strikes the eye somewhat unkindly.

The only items in the picture which promise interest are the wheel-tracks in the foreground and the sun-tipped fence and little hut in the background; but the latter are too far distant to do anything more than suggest the unfulfilled promise. I think that a pleasing picture could have been achieved if its author had photographed it so that its present center would be the right edge, thus doing away with the white wall, and including more of the scene at the left and back.

Y. BILLY RUBIN.

This is a wonderful picture of a very interesting subject, which expresses the season of the year, Spring, and is also a good picture with few really noticeable faults. These are the bad rendering of tones, which was due to the time and way the picture was made and pictorially incorrect, because the subject is exactly in the center of the picture, and it should have been

placed a little to one side. From the appearances of the shadows, this picture was made near the middle of the day, which I think is not a very good time to photograph such a subject. If the maker of this picture had have waited until the sun was entirely out of the sky, either before sunrise or sunset, before or after the sun was above or directly after the sun was below the horizon, and placed the camera on a tripod, using a color-filter and moving far enough to the left to eliminate the branches protruding across the upper right corner of the picture, and making a brief time-exposure of four or five seconds, this would have been a fine picture with the tones well rendered. Making the exposure in the above-described way, the sky would have photographed somewhat darker and made the upper part of the tree stand out much better.

E. VON TILZOR STRUTHERS.

THE most striking defect is the tree being in the middle of the picture. The trunk divides the bottom of the picture in two equal parts and the top of the tree leaves on each side two spaces of similar size and shape. It is true that the space on the right is filled in by some branches.

But branches of what? Of a standing tree or of a dead tree? Indeed, the direction of the branches seems to indicate that the tree is still standing. But the pictorial importance of those branches, being in the foreground, would require that their origin, that is the trunk of the tree, be seen.

Now, what is the subject of the picture? The tree in the middle? A very poor subject, very much lacking in interest.

The concrete building behind the tree? If this low square building has in itself any interest, why is it



THE PICTURE CRITICISED THIS MONTH

hidden behind the tree². The picture might have been made from another point of view, in order that the building be visible, if of any pictorial value.

The picture may be clear, well focused, etc., but I fail to see in it any artistic interest.

II. DE SAVOYE.

The Value of Our Contributing Critics

SOMETIMES we wonder whether our readers grasp the underlying reason of this department. Obviously, it is not to enable the Editors of the PHOTO-ERA MAGAZINE to obtain practice in print-criticism. We get enough of that in our daily work and are very glad to give others an opportunity. This department was established to enable those who make pictures to criticise them as well. By so doing, they may develop an intuitive artistic sense that will help them immensely in their own work. Of course, criticism is of two kinds, destructive and constructive. It is the latter that we all need. It is one thing to criticise and condemn; but a very different matter to show how a picture may be improved. It does no one good to receive a criticism that does not contain a word of merited praise and a suggestion with regard to improvement. We are eager to help our readers develop the gift of constructive pictorial criticism.

Another reason for the establishing of this department is to enable the worker to test his critical strength.

Many a man or woman may not like a certain picture; but why not? There must be reasons; name them. It may be seen that our desire is to cultivate a thoughtful, logical manner of pictorial criticism among our readers that will enable them to give a good reason for every opinion that they express. There are times when it seems as though there was altogether too much "snap judgment" in the criticism of pictures, and this we wish to help our friends to overcome. Unless a photograph is hopeless, there is always some merit to be found in it; and this should be mentioned as quickly and willingly as the faults.

In this department we hope to help overcome the dread of public criticism that many camera-workers appear to fear. We know of a number of amateur photographers who do excellent work but who have never had the courage to send a print to our competitions or to an exhibition. They dreaded the possible censure of the jury. This should not be; but we all know that some critics—and it is true in art, music and literature—appear to delight in arousing a sense of fear and dread in the heart of the artist. In some cases, the critic who is the loudest in denunciation is unable to do as well, if put to the test. Therefore, in this department we hope to overcome the fear or dread of the camerist by encouraging him to submit his prints and to rest assured that he will receive the utmost consideration and courtesy at the hands of Our Contributing Critics.



OUR ILLUSTRATIONS

WILFRED A. FRENCH



As an outdoor floral design, "Lady Grey Roses"—front-cover and page 289—has several attractive features. It would be ungracious not to recognise the two maidens as part of this strikingly novel floral group. The purpose of the artist was to represent beauty in a dual sense, and he has succeeded even at the expense of spontaneity in composing his picture, which is a joy to the eye in this month of roses. It is a supreme triumph of technical skill. Data: scene at the Lewis Hachlen place, at Harrisburg, Penn.; June 21, 1919, 3.30 p.m.; 8 x 10 Eastman Commercial Ortho Film, T. R. lens; stop, F/22; 1/5 second.

"The Spirit of Summer," frontispiece, is a joyful, spirited interpretation of the theme by a master in the portrayal of athletic exercise in the open. Mr. Smith has attained a number of notable successes in this class of work—ski-ers, jumpers, dancers, etc. The young woman whom he has pictured as the spirit of summer fulfills the purpose admirably in youthful exuberance and grace of movement. With excellent judgment the artist has displayed his model against a dark, leafy background, and with consummate skill contrived to produce a picture remarkable for clearness and gradations. Data: June, 1917, at 11 a.m.; 3 1/4 x 5 1/2 Compact Graflex; 7 1/4-inch B. and L. Le Tassar at F/4.5; 1/160 second; Eastman Graflex Film; pyro; enlarged on Enlarging Cyko, Plat Contrast.

Pure love of nature fills every picture from the master-hand of Frederick B. Hodges—the Van Dyke of photographic literature. We love to follow him in his visits to his favorite haunts—the woods, the fields, the hills—and listen to his eloquent apostrophes; then, again, to gaze upon his transcripts of nature's pictures, spiritualised by the artist's soulful interpretation. Thus, the "Sand-Pine" appeals to us with an alluring voice; and, as we contemplate its serene, mysterious beauty, we feel that we understand the influence, the power that attracted the artist with his expressive medium that perpetuated the visions of beauty presented in these pages. Data: "The Sand-Pine"—sand-plains, near Rome, N.Y.; spring; 3 p.m.; sunlight; 5 x 7 Century camera; 8 1/4-inch Plagistigmat; stop, F/6.8; 1/25 second; Stanley plate; pyro; Azo A contact-print; clouds and landscape in one exposure.

"The Evening-Road"—page 278; sand-plains, near Rome, N.Y.; fall; late afternoon; cloudy; 8 x 10 Century camera; 11-inch Tessar; at full opening; slow snapshot; orthonon plate; pyro; Artura D print.

"Under the Birches"—page 279; sand-plains, near Rome, N.Y.; spring, 3 p.m.; fair; 8 x 10 Century camera; 11-inch Tessar; stop, F/32; 2 seconds; orthonon plate; pyro; Azo A 5 x 7 contact-print; part of 8 x 10 negative.

With regard to the obvious merits of the examples of Karl Tausig's artistry, I simply say Amen! to Mr. Floyd's words of praise.

"Wonder-Eyes"—page 284; November, 2 p.m.; ordinary room; good light; Eastman 5 x 7 view-camera; Pinkham & Smith soft-focus lens, 12-inch focus; stop, F/4.5; 1/2 second; Hammer Red Label plate; pyro; Artotone print.

"Master Tom"—page 285; October, 10.30; bright light; Eastman 5 x 7 view-camera; Pinkham & Smith

12-inch soft-focus lens; stop, F/4.5; 1/2 second; Hammer Red Label plate; pyro; Artotone print.

"Macdougall Alley," page 287, exemplifies the pictorial ability of A. J. Voorhees. It is a masterpiece of simplicity in composition and poetic imagination. The very absence of a human figure, so tempting to introduce, permits the fertile mind of the beholder to visualise a trysting couple, a belated individual returning from the club, or a vigilant watchman beneath the searching rays of the street-lamp. The omission of human interest, which is even more effective imagined than seen, gives this unique picture striking pictorial significance. Data: December, 9 p.m.; night; R. B. Auto Graflex (3 1/4 x 4 1/4); 9-inch Struss Pictorial lens; stop, F/6; 15 minutes; Eastman Portrait Film; Sercholl & Hydro; 8 x 10 enlargement on Artura Carbon Black Grade E, Rough Buff; print exhibited at Toronto, Copenhagen, Pittsburgh, Bangor and Portland (Maine).

As to the pictures that illustrate Charles W. Long's resumption of his long-neglected pastime, I feel that it would be difficult to speak with any degree of justice. He might well have added an example or two of his earlier work, or when last he used his camera with gratifying results. In the present case, he seems justified to have resumed his hobby. His artistic perception is clear, and he knows how to construct pleasing pictures from attractive and promising material. By all means, let him continue his commendable work, profit by the work of those who have studied and produced without serious interruption, and whose achievements grace salons and stimulate other workers to greater efforts. For illuminating technical information, readers are referred to Mr. Long's story.

"A College Gateway," page 298, interests because of its novel design. The artistic motive is obvious, also well and completely expressed. The chief pictorial subject—the gateway—stands out prominently, whereas the college-buildings to which it owes its significance occupy a subordinate position, as a subsidiary plane, in the background. The picture is a happy architectural combination and received Honorable Mention in our "Architectural Subjects" contest, October, 1920. Data: July, 2.30 p.m.; veiled sunlight; 4 x 5 Century camera; 6 1/2-inch Planatic lens; stop, F/32; color-screens; 2 1/2 seconds; Seed Double-Coated Ortho; M. Q., much diluted; contact-point on Soft Glossy Cyko; clouds in negative.

The comely maiden pictured by Edward F. Bigelow, the editor of *The Guide to Nature*, has evidently had a refreshing bath and is completing her toilet. Incidentally, she finds it convenient to use her mirror to afford the beholder a more pleasing view of her pretty face, without changing her profile attitude. For this innocent caprice, we are duly grateful.

The picture of the interested baby, "Jean," page 301, was entered in the February home-portrait competition, but was regarded by the jury as a genre rather than a portrait. I hope sincerely that makers of portraits, whether indoors or in the open, will remember the difference between a portrait and a genre. Our readers know it, by this time; but, now and then, an uninitiated worker will show a too liberal interpretation of the term "portrait." Jean's attention should

not have been allowed to stray into toy-land; but he presents a happy, innocent phase of babyhood. The well-distributed artificial light gives a soft, correct rendering of flesh-tones. Data: December 3, 1920; Eastman Portrait-Film; pyro (Portrait-Film formula); No. 2 Velostigmat, series 2; six-inch focus; 1/25 second (10 grains flashpowder); contact-print on Artura Iris E Smooth Mat.

A subscriber, intending to make his first visit to the Swiss Alps, this summer, and interested particularly in the valleys of Interlaken and Grindelwald, may be pleased with others to see the reproduction of a view made ten years ago by the writer. Page 302. This enormous mass of rock, the top of which is never free of snow, rises to the height of 12,150 feet and dominates the beautiful valley of the same name, which is famous as a summer and winter resort. The Wetterhorn may be ascended by a lift (elevator), and from one of the peaks (visible in the picture) runs a cable to the valley below, by means of which a passenger or heavy packages may be conveyed nearly to the summit of the mountain. The only feature of any pictorial value, possibly, is the foreground. This feature, if well managed and pictured, adds much to the beauty of the landscape. In the present instance, it forms a sort of base for the mountain to rest on and also tends to increase the sense of height of the towering mass of rock, ice and snow. Data: June, 1910, 3.30 P.M.; 5 x 7 Cartbridge Kodak; No. 4 Voigtlander Collinear; 7 7/8-inch focus; stop, F/16; Eastman N. C. Film; pyro; 11 x 14 enlargement.

Advanced Workers' Competition

OUR competitions, in the past, of copying works of art, found great favor with those who took part, and created widespread interest among PHOTO-ERA readers. They resulted in a closer acquaintance with works of art, perhaps, including those in the participant's own home and others easily accessible. In some cases, this interest awakened in the participant has become permanent, resulting in serious study of the works of the great painters, etchers and sculptors. The winners of the three prizes were not content with making admirable copies of their subjects, but ascertained their history which, it will be found, adds greatly to the corresponding data.

Of absorbing interest is the story of the Madonna de Loreto, by Raphael, one of the few existing copies of which happened to be within easy reach of Warren R. Laity, a worker whose sterling ability as a landscapist has been represented in the pages of PHOTO-ERA MAGAZINE during the past years. Although I have not seen the picture Mr. Laity has copied, I am convinced that his effort cannot be surpassed in technical fidelity. Mr. Laity has kindly supplied the following facts. The Madonna is a copy of the famous Loreto Madonna of Raphael, and now hangs in the Oberlin College Art-Gallery. This is one of three copies made of this work which was lost or destroyed some years ago. Another one of the copies of this work of Raphael now hangs in the Louvre, Paris, and the third is thought to still be in the Condé Museum at Chantilly, France. The artist of this work is unknown, but it was doubtless done many years ago, for it suggests the careful workmanship in coloring and the brush-work of Raphael. It is the nucleus around which Oberlin College has built up a remarkably fine art-department. The colors range from a dark-brown background through a beautiful orange-color of the Madonna's waist to a wonderful flesh-tint of the child. Data: 4 x 5 Seed Panchromatic plate used with a K3 W and W filter; skylight and arti-

ficial light, 20 minutes exposure at stop F/11; enlarged on Artura Carbon Black extra heavy smooth; lens, Tessar 1c 8 1/4-inch focus; March 5, at 3 P.M., dull day.

The photography of statuary presents obviously greater difficulties than that of pictures—flat surfaces. The matter of lighting is a special study, and requires experience. How much of this Mr. Olsen has had, he has not stated; but there is no question that he has displayed skill and imagination of a high order in his photographic presentation of a charming subject—"Muse Weeping over the Head of Orpheus." Page 306. It will be noticed by the critical observer that Mr. Olsen has chosen an admirable viewpoint—in itself a matter of no mean accomplishment. The illumination is artistic and effective; but whether the photographer was permitted to move the statue to suit his purpose, or whether he changed or modified the source of light, is not given in the data, which are as follows: "Muse Weeping over the Head of Orpheus," by E. Berge; in the open corridor of the Fine Arts Palace, San Francisco, Calif.; September, late afternoon; bright light; Eastman N. C. Film; Rodinal; Watch-Pocket Carbine fitted with Beck Mutar Lens; stop, F/6.3; exposure, 1/25 second; contact-print, Artura Iris, E, Smooth from enlarged negative made with P. & S. Semi-Achromatic lens at F/6.

A. W. Bouguereau, one of the most eminent and best-known painters of the modern academic French school, is familiar to art-lovers largely by his new figures of women and children. Yet his style is easily recognized as we behold the picture of the little French girl, page 307. The easily balanced figure of the child-model, the absence of detracting details, and the simplicity of the composition, are elements that are particularly valuable to the student of pictorial photography. It is not often that the work of a painter serves as so admirable an example in perfection of pictorial composition as applied to figures in the open. The picture was copied as it hung on the wall of the Minneapolis Institute of Arts, as the officials would not allow Mr. Kroening to touch it, and as it was too high for his tripod, he encountered, and overcame successfully, serious difficulties. The data are not complete, but include the use of a Bee exposure-meter, W. & W. Panchromatic plates, a K 3 color-screen, contact-print from 4 x 5 negative, also enlargement on Velours Black Semi-Mat, D. W. Special permission "only for PHOTO-ERA MAGAZINE" was granted, which honor is certainly appreciated by its Editors. Being familiar with the paintings of Bouguereau, they admit that Mr. Kroening's copy is an excellent one in every respect and merits high praise.

Beginners' Competition

As explained in a notice addressed to participants in the competition limited to beginners, no recognition would be accorded to entries devoid of merit. It is no longer the question which of the pictures here submitted are the most acceptable or, as has sometimes been the case in the past, which are the two that have the fewest faults. It is not enough that the entrant should submit pictures that represent his unaided efforts from the very beginning to the end. He must also evince a fair degree of technical and artistic ability. Thus, the Editors of PHOTO-ERA MAGAZINE perform their share in developing amateur-photographers of the really practical sort, and not mere snapshotters who depend upon others to perform, for remuneration, the actual (technical) work which, after all, represents the

(Continued on page 322)



ON THE GROUND GLASS

WILFRED A. FRENCH



The Unique Experience of a Shutter

WHEN things go wrong, as they sometimes do, don't blame the camera! Beginners are very apt to ascribe their failures to the paper, the plate or the film. Sometimes it's the shutter; and right here is where I protest. Of course, you all know, that a shutter functions when actuated by any outside influence; and I am happy or sad according to the judgment exercised by my present master, an amateur photographer. I've got so now that I instinctively know when I am performing my duties properly or not. I had a frightful experience lately, which was due largely to the carelessness of my master. First let me state that I am a between-the-lens shutter of the earlier type, though admittedly working satisfactorily when guided by a careful hand. Second, though my old master was always successful with me, the new owner—a Mr. Foster and a nice young chap—acquired me with the 4 x 5 folding camera, of which I am an important part; but owing to his limited practical experience, he causes me considerable anxiety. Besides, he doesn't fully understand my timing-adjustment which, I admit, is somewhat primitive. He came to grief, recently, and threatened to end my photographic existence. You see, for a time-exposure, the dial, above me, is turned to the letter T, then press the bulb and I open; press again, and I close. For the next time-exposure, press again and the plate is exposed; once more, and the light is shut off. And thus I operate, alternately opening and closing, till the dial is turned back to the letter I for instantaneous exposures. I am not provided with a bulb-exposure.

This event, the saddest of my career, happened in the woods during the beautiful month of May. My boss, an ardent nature-lover, is very fond of brooks, trees and wildflowers. A little waterfall took his fancy. Quickly the tripod was set up, the camera mounted thereon, the distance calculated, the dial set at T and the bulb pressed. After the lapse of five seconds, the bulb was squeezed again. *I am not saying anything.* With a sound of satisfaction, my camerist grasped the camera by the tripod-legs and tramped on. Pretty soon, we came to a group of cardinal-flowers standing at the edge of a brook. With a cry of joy, my boss planted the camera low and close up, looked in the view-finder and gave the bulb a quick pressure. "Fifteen seconds," I heard him say, as he pressed it again. I felt like saying something, but kept still. Not far away, was a trio of pretty, white birches. Did we see it? You bet, we did! It was secured in the same way as the first two. I wanted to complain, but remained silent. Thus we worked on five more attractive gems in these picturesquely resourceful woods, proceeding exactly in one and the same manner, the time given varying from five to fifteen seconds, according to the dope my master derived from his exposure-meter. And all the while, my heart was filled with sadness.

Pretty soon we were in the open, where the light was bright. Realizing this, my master detached the camera from the tripod, which he folded up and carried over his shoulder. He then consulted a little book he took from his coat-pocket, and carefully turned the dial from T, to I. Moreover, he pushed a little knob, sliding in a

curved groove underneath the lens to the right, as far as it would go, which caused me to shrink back towards the inside of the mount and permit the maximum of light to pass through the lens. My operator acted wisely. The air was clear and the sun shone brightly. He consulted his watch, and I heard him say—"Two o'clock." My depression left me at once and I began to grow optimistic. A pretty meadow-brook, with tall grasses growing on each bank, now engaged our attention. "Fifty feet and one-fiftieth of a second," was the audible verdict. Several adjustments, a pressure of the bulb and the view was captured. Oh joy! A group of cows near the edge of the brook farther on—a pretty picture—fared similarly. Oh rapture! And thus, without any change—excepting in the focusing-scale—my enthusiastic master exposed four more plates, stopping work at 3.30 P.M. Now, my master is a true amateur; he scorns the aid of a professional photo-finisher and does all the work himself, in his well-appointed darkroom in the basement of his home. Resting on the top-shelf, I could see, and hear, too, as he developed successfully the plates exposed in field and meadow. I likewise observed him as he failed utterly with the wood-interiors on which he had set his whole heart. "That beats all!" he exclaimed. "I'm going to ask those experts at the camera club what the deuce ails my outfit," I heard him mutter; and to his camera club he went the very next evening. As he entered the club-rooms, he placed the camera on a chair, and displayed the eight uniformly dark negatives, none of which showed the least trace of an image. "Light-struck!" was the emphatic and unanimous opinion of the members present. Many theories as to the cause were advanced, but none seemed to fit this case.

Then Mr. W. entered, glanced at the plates, asked a few questions, and inspected the camera. After a few seconds' reflection, he handed it to its expectant owner, saying: "Look sharp now, Mr. Foster. This is the way you started out that morning, with the shutter open. Then you pressed the bulb to open the poor thing ('poor thing, indeed!' said I to myself), you closed it. Of course you got no picture! After the lapse of five seconds, thanks! you closed the shutter, as you thought; whereas you opened it, exposing the plate until you made the next exposure. You kept right on in the same way, getting no results, until you switched over to snapshot exposures. It's an old-style shutter, but all right if used with care. Look out and don't let anyone else monkey with it while you are making pictures; and, for heaven's sake! don't press the bulb by accident, otherwise she'll open and spoil the plate, just like these here. Anyhow, be sure the shutter is closed before you draw the slide ready to expose a plate. Don't mention it. Glad to have solved the mystery."

At the Agfa Camera Club

SIMPSON to new member: "I hear you work the wet-plate process. That so?"

N. M.: "I should say I did! Washing the plate after development; more, and hours of washing after fixing, and getting your hands and clothes wet. Wet process? I'll say it's wet, all right."



ANSWERS TO QUERIES



D. C. F.—The word “journal,” according to Webster, is: “a daily newspaper; hence; a periodical; magazine.” Therefore, it is a question of taste, whether or not the word “journal” should be applied to a publication issued monthly or weekly, instead of daily. In the case of the *British Journal of Photography*, the publishers and editors no doubt appreciate the full meaning of the word “journal”; but they would not be justified, after the long and brilliant history of that publication, to change its title at this late date. Certainly, every reader of the oldest and foremost photographic periodical printed in the English language would be willing to make an exception in their favor as to the use of the word “journal.”

K. Y.—One way to mount pictures with paste is to obtain a large piece of plate-glass, collect the prints from the wash-water and place them face down on the glass—one on top of the other. Then apply the paste to the topmost print with a large brush—being careful to cover all corners thoroughly—lift the print from the pile and mount it. Continue to do this until the last print is reached. If the pile is not moved the paste will not reach the picture-side of the prints. The advantages of Grippit, the new non-curling adhesive, are worth your consideration. This excellent product is advertised in the advertising pages of this issue.

O. C. M.—Horizontal scratches on roll-film negatives are sometimes caused by trying to twist the paper more tightly around the spool after removing it from the camera. If, in addition, small particles of emulsion become loosened during the operation of twisting, they are apt to tear long, deep gashes in the celluloid base of the film. Such abrasions cannot be removed satisfactorily by retouching. Whenever possible, use a roll-film camera that is equipped with some form of tension spool-holder. This device prevents the film from unrolling faster than the winding-key is turned. In any event, it is far better to wrap up a loosely wound roll in heavy manilla paper than to try to twist the black paper more tightly around the film. Attention to this matter is of the greatest importance.

C. H. K.—We think that the picture of the actor shaking hands with himself was made by the usual method of double exposure as follows:

Each side of the picture was exposed in turn; the first half of the picture being made of the actor shaking hands with another person, the arm being cut possibly at the coat-sleeve, which is backed up with a background of approximately the same color as the material of the coat. The second exposure was made with the actor, of course, assuming the same position as the second individual as seen in the first picture.

The picture referred to in the newspaper clipping where an actor stands behind his own back was probably made in a similar way aided by an accomplice.

C. K. H.—Although the instantaneous exposure for your photograph made by moonlight was short, it was not so short as to make it extremely remarkable. Roughly speaking, moonlight may be taken as being 1/500,000th the intensity of sunlight. If the sun had been present instead of the moon, in this picture, it is clear that the exposure of 1/1000th of a second would have been ample, having regard to the

nature of the landscape and the fact that the trees are merely silhouettes against the sky and snow. Half a minute corresponds to 30,000 times as much exposure as 1/1000th of a second with sunlight. While this is not sufficient, it would probably give a useful if very much underexposed negative, and we imagine that this was what was obtained. Moonlight is slightly less actinic than sunlight, and it is highly improbable that the exposure was increased to any effective degree by the northern lights.

M. E. P.—Claude Lorraine Glass has been used by painters to show a reduced view of a landscape with subdued tints. It is made of a plate of black glass with one side ground to a convex figure. As applied to photography, it is of more interest to landscape-photographers than to the average worker. In this same connection may be mentioned **black glass** which is deeply colored with manganese and iron. This has been used as a reflector in photographing clouds.

J. W. K.—Latent light was discovered by Niece de St. Victor. He found that paper if saturated with nitrate of uranium was exposed to sunlight and enclosed in an opaque tube or case for several months, it would still give off radiations capable of affecting a photographically sensitive surface. Even plain, white paper acted in a similar manner.

W. L. E.—Metol-Hydrokinone has not been used very much for the **autochrome-process**. According to reliable reports, it has never been officially recommended by M. M. Lumiere. Several years ago Mr. A. B. Hitchins, now chief chemist of the Ansco Company, advised the following formula for use with autochrome plates:

For the first development, Solution A:

Water	1,000 c. c. s.
Metol	6.5 gms.
Soda Sulphite (anhydrous)	40 gms.
Hydrokinone	2.10 gms.
Potassium Bromide	2.5 gms.
Hyposulphite of Soda	0.10 gms.
Ammonia, 0.880	20 c. c. s.

For use he suggested one part developer, one part water. Just what results are to be obtained we cannot say; but if some worker wishes to experiment, we should be glad to hear from him with regard to his success with the developer.

S. O. M.—The removal of ink-stains from a print is a difficult matter, if not impossible. Although you do not mention the kind of print, if it is a silver-print virtually anything that will remove the ink will destroy or injure the image. Perhaps a solution of oxalic acid or salts of lemon may be of some assistance. If this has no effect, usually the best thing to do is to make a copy of the photograph through a color-screen and on some orthochromatic plate. By writing to the Eastman Kodak Company, Rochester, New York, you may obtain a booklet which describes in detail the use of panchromatic plates and K-filters.

C. W. J.—Stereo-cameras and accessories may now be obtained in virtually all the large cities of the United States and Canada. You need have no hesitancy about entering this fascinating branch of photography as supplies may be obtained promptly.



EVENTS OF THE MONTH

Announcements and Reports of Club and Association Meetings, Exhibitions and Conventions are solicited for publication



Chicago Camera Club Annual Show

THE Eighteenth Annual Exhibition of Pictorial Photography, given by the Chicago Camera Club, took place from April 15 to May 15, 1921, at the Art Institute of Chicago. The workers represented were Gordon C. Abbott, Arthur E. Andersen, Otto W. Bahl, Robert C. Black, Alvin R. Born, C. N. Bowen, B. B. Conheim, A. L. Estep, N. A. Fleischer, E. E. Gray, George H. High, K. A. Jeldsen, William H. Klose, Edward L. MacMillan, James E. Mead, Frank E. Rich, Bernard F. Rogers, Jr., Arthur Ryan, John Julius Ryan, Gilbert B. Seelhausen, A. W. Sherman, Paul T. Tarnoski, R. W. Trowbridge, F. M. Tuckerman, Edward F. We's, Leonard Westphalen, W. F. Wiecekne, and Paul Wierum. The total number of prints shown was sixty-four.

The officers of the Club are as follows: John Julius Ryan, president; James E. Mead, vice-president; Paul T. Tarnoski, secretary; and Frank E. Rich, treasurer.

The Exhibition Committee was composed of the following: Gordon C. Abbott, Alvin R. Born, Leroy T. Goble and Paul Wierum.

Members of the Jury of Selection were: Thomas E. Tallmadge, Sara Holm and Frederick M. Grant.

Annual Exhibition of Photography Brooklyn Institute of Arts and Sciences

THE Thirty-First Annual Exhibition of Prints by members of the department of photography of the Brooklyn Institute of Arts and Sciences was held at the Academy of Music Building, Brooklyn, New York, May 10 to May 14, 1921. The reception and private view was held on Monday, May 9, from eight to ten in the evening.

Twenty-One Consecutive Yearly Sittings

ACCORDING to *The British Journal*, Messrs. William Spencer & Son, Pudsey, York, England have completed recently a remarkable series of photographs. For twenty-one consecutive years they have made a portrait of Mr. Bradley—from his birth to his twenty-first year. Each year, upon his birthday, an exposure was made. The series forms a unique collection of portrait work. Why should not photographers in the United States and Canada develop the idea and bring it to the attention of their patrons?

Exit "Operating-Room"

Abel's Weekly deserves much credit for its persistent efforts to abolish the odious term, "operating-room." It publishes opinions from various parts of the United States, indicating that "operating-room" is no longer wanted and that the short and appropriate word, "Studio," is decidedly preferable.

PHOTO-ERA MAGAZINE agrees with *Abel's Weekly* that "operating-room" should be given a permanent congé and that it is to be banished at once and for all, and in favor of the ideal term, "Studio." Every portrait-photographer who loves and respects his profession, and still applies the term "operating-room" to the

place where he makes the sittings (photographs his customers), will be glad, we are sure, to adopt the word, "Studio."

Among the many substitutes for the deservedly ill-fated "operating-room," the one designated as "salon d'art" by a portraitist in Phoenix, Arizona, appears a little far-fetched. On the whole, we do not consider it an improvement on the odious term now being consigned to oblivion.

Photography in Esthonia

THE new little republic, situated on the southern shore of the Gulf of Finland, a short distance from Petrograd, and about the size of the State of Massachusetts, with a population of less than one million, deserves universal admiration in many ways. Its people are stout-hearted, highly efficient and optimistic.

PHOTO-ERA MAGAZINE has several subscribers in that interesting region, one of whom, a prominent merchant of Reval, is an ardent and successful amateur-photographer. Accompanying a courteous letter (written in admirable English) sent to the Editor of PHOTO-ERA MAGAZINE, recently, was a beautiful photograph-album, 8 x 10 inches in size, tastefully and originally gotten up, with the national seal of Esthonia (Eesti Estonia) embossed in silver, gold and colors, and containing twelve pictures, 4 x 6 in size. These prints, in sepia, illustrate historic castles and views in Esthonia, and demonstrate the artistic, technical and pictorial ability of the sender. Enclosed in the album is a complete typewritten description of these interesting pictures. Any camera club desirous to inspect this interesting album, is requested to communicate with the Managing Editor of PHOTO-ERA MAGAZINE.

Welcome News to Our Pictorial Contributors

HERE is good news for those who like to derive pecuniary benefit from their successful camera-results. Underwood and Underwood, art-publishers, calendar-makers and purveyors of photographs made in nearly every part of the world, can use good material in the form of prints or negatives, or both. This will be of special interest to our numerous pictorial contributors and prize-winners. The above-named firm is in New York.

Photography in Manchuria

WITHIN recent years the demand for photographic supplies in Manchuria has steadily increased, writes Consul-General Albert W. Pontius from Mukden, in a report. Ten years ago, the art of photography was little known in districts away from the treaty-ports, but to-day the popularity of photographs has caused the trade to make its way gradually into remote districts. The spreading of Western education has done much towards introducing photographs into the more remote districts, as students from those points, attending schools in the large cities, invariably send photographs home to their friends and relatives. Amateur photography is also rapidly becoming popular, and it is a common sight to meet groups of students

from the various Government schools carrying cameras on their excursions to various points of interest in and about Mukden. Until a few years ago, the only photographers doing business in this district were Japanese; but to-day there is a fair number of studios owned and conducted by Chinese, doing work comparing favorably with that of Japanese competitors.

The British goods imported from Hongkong, Singapore, and British India came, of course, from the British Isles originally, and those imported from Japan came largely from the United States, as Japan is unable to manufacture lenses or other principal parts of the cameras of the Kodak style. Japan manufactures cardboard-mounts and also does a thriving trade in paper and chemicals. The larger sizes of cameras, such as are used by professional photographers, are mostly of Japanese manufacture, the only parts coming from abroad being the lenses, which are imported principally from France and the United States. Prior to the war a fair amount of lenses of a cheap grade were imported from Germany and Austria.

Most of the hand-cameras of the Kodak style, both folding and box-shape, are imported from the United States, and make pictures ranging in size from the tiny postage-stamp size to pictures measuring 5 to 7 inches. As in some other parts of the world, the post-card size is by far the most popular in China. Dry-plates, films, and printing-papers, such as bromide and development papers, are for the most part imported from the United States. A large proportion of the chemicals used here for the developing of plates and films is also of American origin. The Japanese are the only importers of photographic supplies in this district, and have a monopoly of the trade. They grant one month credit on purchases and a discount of 2 per cent for cash. Concluding, the Consul says that a large trade in this line could be worked up if reliable local agents were appointed to push trade. Similar credits and discounts as offered by Japanese importers would have to be granted. There are various photographic novelties which are common in Europe which are quite unknown here, and for which a large demand could probably be created.

The British Journal.

John Paul Edwards Gives Talk

OUR readers will remember with pleasure the interesting review of the Eighth Pittsburgh Salon which Mr. Edwards contributed in the May issue. As to his ability as an author there can be no doubt; but we were pleased to learn, although tardily, that he is a very entertaining speaker. On April 7 he gave an illustrated talk on pictorial photography in California at the Morristown, New Jersey, library. The talk was enjoyed greatly and much appreciated by a large audience. It was through the efforts of Mr. Frederick W. Keasbey, manufacturer of the well-known Struss Pictorial Lens, that Mr. Edwards was prevailed upon to visit Morristown. Instead of using the usual stereopticon, Mr. Edwards placed his pictures—about 11 x 14 inches in size—upon the wall and threw a spotlight on each one in turn while the hall remained in total darkness.

Robert Ballantine, Glasgow, Scotland

MANY of our readers are interested to purchase from dealers in Great Britain reliable, used photographic equipment of British or foreign manufacture, provided that they can obtain prompt and satisfactory service. For this reason we take pleasure to call attention to the

large, well-established firm of Robert Ballantine, 103½ St. Vincent Street, Glasgow, Scotland. We have received a list of used photographic apparatus that should be of interest and value to those of our readers who contemplate the purchase of a high-grade foreign outfit. Mr. Ballantine has had over thirty-five years' practical experience and will be glad to send his list to any reader of PHOTO-ERA MAGAZINE at request.

Exhibition by H. B. Turner and R. E. Hanson

A JOINT exhibition of the work of Herbert B. Turner and Raymond E. Hanson, each a master-craftsman of the Society of Arts and Crafts, Boston, U.S.A., was held in the art-gallery of the Society, April 21 to May 4, 1921. Each pictorialist exhibited thirty-one prints, comprising subjects of a quality and character now very well-known and admired.

Mr. Turner's subjects illustrated his travels in many lands of Europe, the West Indies, Canada, and the Hawaiian Islands. Many of his charming pictures, and those of Mr. Hanson, had been seen at the Boston Young Men's Christian Union Camera Club, last April, where they captured a number of high honors.

Mr. Hanson's prints were landscapes and genres—all New England subjects. Several new and delightful subjects, never before exhibited, were "A Maid of Marblehead," distinguished for grace of pose and refinement of treatment, and several landscapes of great pictorial beauty made in the Cape Cod district. Both artists reported large sales of their prints.

Henry Eichheim's Exhibit at Chicago

AN exhibit of unusual interest and beauty was a collection of twenty-six prints from the portfolio of Henry Eichheim, of Boston, U.S.A. Most of Mr. Eichheim's pictures, which represented landscapes, genres, character-studies, temples and gardens of Japan, were exhibited at the St. Botolph Club, Boston, earlier in the season. A number of them were also shown in the member's annual exhibition of the Young Men's Christian Union Camera Club, Boston, April last. On account of the unusual character of subjects and treatment, the exhibition attracted a great deal of attention and was one of the most gratifying incidents in the spring-program of the Chicago Camera Club.

Alice G. Baumann's Prize-Picture in Home-Portraits Competition

OWING to the long distance between the United States and Switzerland (the home of Alice G. Baumann, who won first prize in the recent Home-Portraits Competition for her picture "On the Porch") the data arrived too late to be included in the May issue. As this information is always of important interest, we print it herewith: Made 11 A.M.; bright sunlight; 4 x 5 Graflex Camera; seven-inch Wollensak Verito F/1; Stop, F/8; exposure, 1/10 second; plate, 5 x 7 Seed 27; pyro; print, Gevaert Ortochrome, from which a 7 x 9-inch bromide enlargement was made.

"Mt. Monadnock—Beloved and Beautiful"

THE picturesque aspect and history of Mt. Monadnock—the largest mountain in southern New Hampshire—formed the subject of an illustrated lecture given by Herbert W. Gleason before the Appalachian Mountain Club, Huntington Hall, Boston, U.S.A., April 20, 1921. Of the numerous illustrated lectures in the reper-

toire of Herbert W. Gleason, none surpasses in topographical interest and literary effort, as well as in scenic beauty of the colored screen-pictures, "Mt. Monadnock—Beloved and Beautiful."

The lecturer dwelt chiefly on the manifold attractions of the mountain as an all-the-year-around resort, and as it appealed to Emerson and Thoreau who visited the mountain and camped on personally selected spots which are greatly cherished by the inhabitants as hallowed landmarks. The photographs made by Mr. Gleason exemplified the rare beauty of Mt. Monadnock and of the extensive views obtained from various parts of the mountain during every season of the year.

We congratulate Mr. Gleason on his brilliant success in giving an entertainment that is regarded by his friends and admirers as peerless in character and quality. It is to be hoped that the people of southern New Hampshire—of Jaffrey, in particular—may have an opportunity to enjoy this beautiful lecture which does full justice to the solemn and varied beauty of their beloved Mt. Monadnock.

Woman's Auxiliary of P. A. of A.

WE are glad to call the attention of our readers to the careful preparations that are being made by the Woman's Auxiliary of the Photographers' Association of America to entertain the ladies who are expected to attend the National Convention at Buffalo, New York, July 18 to 23, inclusive.

It is urged that photographers bring their wives this year, especially, as every provision is to be made to make things pleasant for them during the sessions of the convention. It is planned to have the wives of the photographers meet the wives of the manufacturers and dealers, and there is to be a social room and headquarters in the main hall where ladies from different parts of the country are to act as hostesses each day, and afternoon-tea will be served free of charge. Further particulars of interest to those who expect to attend the convention may be obtained from Mrs. Frank V. Chambers, secretary, Woman's Auxiliary of P. A. of A., 1520 Connecticut Ave., Washington, D.C.

W. S. Davis' Article in May Photo-Era

THOSE who have read, and doubtless will profit by, the instructive article, "Controlling Tone-Values by Compensating-Positives," by William S. Davis, in May PHOTO-ERA MAGAZINE, must have noticed the accidental transposition of the pictures on pages 231 and 233. It is not very easy for a compositor, however intelligent, to differentiate between two halftone blocks that are of the same subject, and so similar in appearance, as these two pictures. Of course, number three belongs in place of number one, and vice versa. We feel that this explanation is due not only to the author, William S. Davis, but to the reader, so that he may be enabled to read the article intelligently and apply the lessons contained therein.

Brooklyn Show at New York Camera Club

THE walls of The Camera Club, of New York, during the month of May, 1921, were occupied by an exhibit of ninety-three pictures, the work of members of the Photographic Department of the Brooklyn Institute of Arts and Sciences. The prints were of a very high rank, many having been shown abroad and at leading salons in America.

Our Illustrations

(Continued from page 317)

real joy and satisfaction of amateur-photography, and which calls for skill, judgment and vigilance in the doing.

John J. Griffiths is an industrious worker, but, I regret to state, very uneven in his work. The present effort, "A Shady Brook," page 311, is, perhaps, the best thing he has ever offered to PHOTO-ERA MAGAZINE. Here is an opportunity for our Contributing Critics; but the picture is not in their department. The view is certainly an engaging one. Its chief and virtually only serious fault is its rigid, symmetrical arrangement, which could have been avoided by shifting the viewpoint to the left, and in such a way—if possible—as to exclude the group of tree-trunks at the left, and raising the camera to bring the bridge lower in the picture. The tones are admirable and the definition very pleasing in its absence of sharp detail. Data: June, between 3 and 4 p.m.; very strong light; in shade; 4 x 5 Premo Camera; 6½-inch R. R. F/8 lens; at F/32; 4 seconds; Central Plate, slow grade; M. Q.; contact-print on Special Velvet Velox, semi-mat.

"Voland Road," page 312, is used as a filler, also to show what not to do. Any worker with artistic discrimination can see that the two principal objects (one would suffice) appear to be in the same plane, although the tree at the right is nearer. The exposure being too brief resulted in undue contrast and false tone-values. Everything but the two trees is much too light. There is no need of the stone-wall and the road to be without tone and character. More exposure—one second, at least—would have improved the general appearance of the picture; but the subject, itself, is not a pictorially promising one, although the viewpoint would need to be changed, and a time chosen when the light produced a more favoring effect. I would suggest an hour in the morning which would cause shadows to fall toward the left. Of course, a trial in the summertime might be still better, although the sun is higher in the heavens, nearly at the zenith in July or August. With an adequate exposure, a not too dense color-screen, etc., Mr. Davis should be able to get a much better result, though it be only technically superior. Data: January 11; bright light; 3 A Kodak (3¼ x 5½); 6½-inch Zeiss lens; stop, F/22; 1/5 second; film; pyro; contact-print on Velvet Velox.

Example of Interpretation

No finer picture of summer-flowers as a subject of emulation could be presented than "American Daisies," by H. R. Decker, page 308. It graced the pages of this magazine five years ago and at the time evoked genuine admiration by reason of the harmony, grace and beauty of the composition. Data: Made indoors; August, 11 a.m.; good light; subject placed 3 feet from window covered with cheesecloth; 4 x 7 Korona view-camera; 8-inch R. R. lens; stop, U.S. 8; 5-time Isos color-screen; 12 minutes; Cramer Isonon; A. B. C. pyro; contact-print on Prof. Studio Cyko.

Our Contributing Critics

WHAT a picnic for our assistant-critics! This *al fresco* group came to the Editor as a serious contribution. It cannot be denied that the scene is surcharged with interest; but our readers are eager to know its defects and its possibilities of improvement.

Pictorial Photography at New Bedford

MASSACHUSETTS is certainly developing camera-club which are doing excellent work and are destined to enjoy a long, industrious and productive life. Among these successful organisations is the Swain Camera Club, of New Bedford, which has about forty members, many of whom have competed successfully in PHOTO-ERA MAGAZINE competitions in the past. One of the members, Mr. Charles O. Dexter, wrote a superbly illustrated article on the use of the soft-focus lens for June PHOTO-ERA, 1915.

The Club held its annual members' show, during the week of May 8, at the Swain Free School of Design, New Bedford, of which Harry A. Neyland, the distinguished marine-painter, is the director. The prints, in the main, displayed a high degree of artistic appreciation and, in several instances, a marked advance in pictorial expression, particularly in the case of Mr. Church and Mr. Harper. A feature of this event, which attracted many visitors, was a talk on the rules of composition as applied to pictorial photography, given by Wilfred A. French, Ph.D., the Managing-Editor of this magazine, at the invitation of Director Neyland. According to *The Morning Mercury*, Mr. French appears to have made a favorable impression:

WILFRED A. FRENCH, DISTINGUISHED ART CRITIC,
SPEAKS AT SWAIN SCHOOL

Wilfred A. French, the distinguished American art-critic and editor of PHOTO-ERA MAGAZINE, gave an enlightening address upon pictorial photography last evening before an enthusiastic gathering that taxed the capacity of the lecture-hall at the Swain Art School.

Mr. French, who came at the invitation of Harry Neyland, director of the school, stated that he was not prepared to speak upon any definite point in connection with pictorial photography, but would consider it in a general way, and more specifically in reference to the work which was on exhibition in the galleries, produced by New Bedford photographers.

Selecting typical photographs from the Swain Camera Club exhibit, he gave special attention to those that emphasised or violated the rules of pictorial composition, stating his reasons for judgment and carefully explaining his points by illustration in detail. He gave much credit to Herbert J. Harper for the general excellence of his work, and said that work which Mr. Harper had submitted in competition a year ago gave little promise. His improvement to work of present excellence gives an indication of what may be accomplished by any serious worker in photography.

Mr. French found much of excellence in the Camera Club exhibit, and in several other instances gave praise for work of pictorial standard, notably several photographs by Howard M. Wood, whose print, "The Beginning of the Trail," won second prize.

A Bold Advertising-Feat

A CORRESPONDENT greatly interested in Lincolniana writes us, asking how much truth there is in the assertion made in the advertisement of a certain photographer that his now aged father, when a boy, was sent by the publishers of *Harper's Weekly* to photograph Abraham Lincoln when he delivered his famous Gettysburg address. Our correspondent states that, desirous to add a print from said negative to his collection of Lincoln portraits, he wrote Harper and Brothers who, in their reply, regretted never to have heard of the matter and could find no evidence of the assertion made in behalf of this alleged Lincoln photographer.

We know that others have investigated this claim that links the old photographer with the great President, and have come to the conclusion that it is all "moonshine." All we have to say is that it is a pretty story, true or not, and serves the purpose of the advertising-agent. How much it has to do with the price of eggs, we do not know. If photographs are excellent in quality, and the business-methods of the studio-proprietor are exemplary, there should be no need to refer to men who are dead and gone.

Clarence H. White Summer-School

A RARE photographic opportunity awaits the amateur or professional photographer who can arrange to avail himself of the privileges and thorough instruction offered by the Clarence H. White School of Photography in the summer-session at Canaan, Connecticut. From July 5 to August 27 the school will be in session under the direct supervision of Mr. White. The pictorial beauties of the famous Berkshire Hills are well-known; and, combined with the refined and pleasant surroundings, the intelligent student cannot fail to make rapid progress. Further information may be obtained from Clarence H. White, 460 West 144th Street, New York City.

Our May Issue

ALTHOUGH the size of the edition of PHOTO-ERA MAGAZINE rarely varies, we have printed several hundred extra copies of the May issue on account of the illustrated review of the Eighth Pittsburgh Salon written by John Paul Edwards. The illustrations are by master-workers, and represent in a limited way the highly artistic character of the pictures shown at this very successful American salon. A few copies of the May issue still remain, and those who are interested for themselves or on behalf of others, will do well to send in their orders without delay, the price per copy being twenty-five cents each, post-paid, to any part of the United States.

Eastman Portrait-Film in Small Sizes

THE popularity of Eastman Portrait-Film among professional photographers is now spreading rapidly among amateur-photographers. A contributing factor is that Portrait Film is now being furnished on order in amateurs' sizes, such as $6\frac{1}{2} \times 9$ cm., also $3\frac{1}{4} \times 4\frac{1}{4}$, $3\frac{1}{4} \times 3\frac{1}{2}$ and 4×5 inches. For some time, many workers were under the impression that Portrait Film was not made in sizes smaller than $4\frac{1}{4} \times 6\frac{1}{2}$ inches. Certain dealers carry amateurs' sizes in stock, although not regularly listed or advertised by the Eastman Kodak Company. $3\frac{1}{4} \times 4\frac{1}{4}$ or 4×5 Portrait Film, however, can be used in the Graflex Magazine-Holder by using a piece of cardboard in the septum. The Eastman Kodak Company is now working in the direction of supplying a Film Magazine-Holder for Graflex Cameras.

Foch Sends Coolidge Autographed Photograph

AN autographed portrait photograph of Marshal Foch, praising the heroism of the 26th Division, was received by Vice-President Coolidge, May 11. The inscription on the photograph is as follows: "To Governor Calvin Coolidge, of Massachusetts, in recognition of the generosity of his State and the heroism of the 26th Division."



LONDON LETTER

CARINE AND WILL CADBY



ALTHOUGH we remarked last month that there was at present no sensational drop in the prices of photographic goods, charges are, nevertheless, on the downgrade, and we are pleased to note that Messrs. Kodak have issued reduced prices for plates and films of every description, and postcards. They have lowered also the value on which they now pay carriage, which is fifty shillings, and, better still, the high charge for cases and packing, that has been such an irritating, but of course, necessary feature of the war-period, is altogether abolished on orders of the value of five pounds sterling. This is all in the right direction, and a few further cuts in prices would no doubt encourage trade in every direction.

Photography, it is said, will be all important in the Hunt for Oil by Air, and is about to be undertaken from London. South America is the scene of operations, the delta of the Orinoco River being the particular locality to be searched. Two flying-boats will be used, and photography is to play its part in spying out the distinctive features of oil-land, such as the partly destroyed vegetation which is observable in important oil-bearing areas, and to distinguish the tributaries which run into the parent-spring. Also, it will be invaluable in recording the forest-roads and approaches.

Perhaps, the most photographed personality at the present time in England is the Prince of Wales. Quite recently, a collection of snapshots of him has been published under the name of "The Prince of Wales' Book" (Hodder and Stoughton, 7/6), the entire profits of which will go to St. Dunstan's Home for Blinded Soldiers and Sailors. These photographs are mostly snapshots made of the Prince at the war, on his travels and at home. We are shown him going down mines, accepting kangaroos, chatting to dockers, etc.

These snapshots are interesting from the fact that they are rather a revelation of the Prince's character. He always appears in them natural and simple, and shows a lively interest in whatever is going on. He has a jolly smile, and never looks bored, so these photographs encourage us to believe that his popularity is a spontaneous and not a manufactured one. As the snapshots have been made by all sorts of people, mostly unknown, it demonstrates what photography can achieve in the revelation of character.

What most people would be discussing—were it not for the coal-strike—is the large gathering of photographers in London, at the end of next week. On the same lines as last year, the Professional Photographers' Association has arranged its Conference and meetings to synchronise with the great Photographic Fair organised by the Photographic Dealers' Association at the Horticultural Hall opening of April 15. If our train-service is still doing its duty, one will be able, during the week, to meet photographers from all over the Kingdom and of every sort and description. A common interest mixes people up in a wonderful way, and we noticed last year how friendly and informal everyone seemed. However keenly competition is worked in business, one saw a very real spirit of comradeship between the different members and employees of the firms represented.

The president of the P. P. A., Mr. Frank Brown, retires at this time, and the new president who has been

elected is Mr. Swan-Watson, a popular veteran-photographer of Edinburgh. Without a doubt, under his leadership and because of his long experience, the P. P. A. will continue to flourish as in the past and continue to grow in the future.

We hear of some very attractive lectures which will be held at the hall during the week. We are afraid that we have not mentioned before that the Fair runs for this time. Two lectures which we are hoping to hear are "Photographic Portraiture from a Woman's Point of View," by Madame Yevonde, and "Psychology of the Studio," by Mr. P. C. Crowther, with Mr. Richard Speaight presiding. We are looking forward to some remarks by this experienced photographer and psychologist; for, who has more opportunities to gather material than Mr. Speaight?

The members of the P. P. A. will be taken by special train to Harrow, where they will be shown over the Kodak works. That same evening, Mr. N. E. Luboshey of Kodak will give a talk on "Continental Studios." We are wondering if he will have the same opinion as ours—that they are remarkably in advance of our own, at least as far as photographic work goes. We have often stopped and looked in show-cases abroad, and have been impressed by the excellent work done by quite ordinary professionals with modest-looking premises. It is sincere, original work, not heavily retouched or tricky in any way.

The Photographic Fair is so comprehensive and interesting, that people who have not the time to give up whole days to viewing it are bound to find it a little unsatisfactory. One needs plenty of leisure to browse around comfortably and chat with people, and, however much time we have allotted to it, we have always had the sensation of being rushed. The fact is that there is so much to see. Horticultural Hall is a big building, and it is fairly closely packed. We remember, what an astonishing lot of material had been got into it last year. There is one thing, however, we are very determined not to miss, and that is the Kodak Automatic Enlarger. We hear that it is quite a pretty sight to see the size of the enlargement being changed by a simple contrivance, and the wonderful thing is to watch how the picture is *always in focus*. We are hoping to mention this in our next letter. All this, of course, provided we are not in the midst of a revolution with train-service cut off, and a Soviet keeping us busy here!

Mr. Ward Muir, who is still in Switzerland, has been writing a drama for the film, "The Icicles of Death," and it was acted and filmed the very next day after the scenario had been finished. It was quick work, but the film-company was not staying long. It had come to do "Slips that Pass in the Night" in its correct surroundings. As readers perhaps remember, the book was written at Clavadel, near Davos, where the scene of the story is laid.

We hear that Mr. Muir's film is of the gruesome kind which the Grand Guignol Theatre in London has introduced, so that its title already gives us the correct shudder. No doubt, such films are of interest to many persons; but, in the main, those of a more cheerful tone are to be preferred.



RECENT PHOTO-PATENTS

Reported by NORMAN T. WHITAKER



THE following patents are reported exclusively for PHOTO-ERA MAGAZINE from the law-offices of Norman T. Whitaker, Whitaker Building, Washington, D.C., from whom copies of any one of the patents can be obtained by sending twenty-five cents in stamps. The patents mentioned below were issued from the United States Patent-Office during the month of January, the last issues of which have been disclosed to the public.

Patent, Number 1,372,515, for Selecting Screen for Polychromatic Photography, has been granted to Albert Keller-Dorian, Mulhouse, France.

Color-Sensitized Photographic Material, Patent, Number 1,372,548, has been granted to Frank Forster Renwick, Brentwood, and Olaf Bloch, London, England, assignors to Ilford Limited, Ilford, England.

Victor St. Clair Blackett, of Halifax, Nova Scotia, Canada, has been granted patent, Number 1,372,593, on Photographic-Film Sealer.

Patent, Number 1,372,645, Diaphragm for Photographic Lenses, has been granted to George William Cooper, London, England.

Photographic Camera for Taking-Up Part Negatives for Naturally Colored Pictures, patent, Number 1,375,175, has been granted to Serge De Procoudine-Gorsky, Granstad, Konnerud, near Drammen, Norway.

Kotaro Sayo, of San Francisco, California, has been granted patent, Number 1,375,324, for Roll-Film-Turning Device.

Patent, Number 1,375,659, Screen. Heinrich Illig, Frankfurt-on-the-Main, Germany.

Photographic Camera, patent, Number 1,374,678, has been granted to William A. Peters, Chicago, Ill., assignor to International Patent Licensing Corporation, Chicago, Ill.

Jacob J. Wolf, Jr., of New Orleans, La., has been granted patent, Number 1,374,794, on Camera.

Patent, Number 1,374,813, Half-Tone Screen. Charles L. A. Brasseur, Orange, N. J.

Process of Photographic Reproduction, patent, Number 1,374,853, has been granted to Robert John, New York, N.Y., assignor to Iconochrome Company of America, Inc., a Corporation of New York.

John P. Bethke, of Milwaukee, Wis., has been granted patent, Number 1,374,875, for Sensitive-Material-Marking Device.

Patent, Number 1,373,626, Vignetting Attachment for Multiple-Exposure Cameras. Select E. Moine, Lubbock, Texas.

Photographic Printing Apparatus, patent, Number 1,373,893, has been granted to Fred V. Koepke, Lamolite, Ill.

John Gordon, Jr., of Rochester, N.Y., assignor to Eastman Kodak Company, Rochester, N.Y., a corporation of New York, has been granted patent, Number 1,372,746, for Aerial Photographic Apparatus.

Patent, Number 1,372,803. Photographic Camera. Paul Dietz, Philadelphia, Pa.

Method and Apparatus for making Color-Correcting and Color-Separation Negatives for Plate-Printing Trades, patent, Number 1,373,020, has been granted to Emil A. Raschke of Chicago, Ill.

Jens Herman Christensen, of Holte, Denmark, has

been granted patent, Number 1,373,053, Method and Apparatus for Producing Colored Photographic Pictures.

Patent, Number 1,373,311. Apparatus for the Treatment of Photographic Negatives or the like with Liquids. Serge De Procoudine-Gorsky, Granstad, Konnerud, near Drammen, Norway.

America's Largest School of Music

INASMUCH as a number of our readers have relatives who attend the New England Conservatory of Music, Boston, U.S.A., it may be interesting to know that this institution has at present thirty-six hundred students— young men and women. The school is by far the largest and most important conservatory of music in the United States. It was incorporated in 1867, and for about twenty years has occupied the present building on Huntington Avenue near Symphony Hall. The institution is self-supporting, and among its graduates are hundreds of prominent musicians of both sexes who have become famous as composers, singers or players.

One of the principal features of the New England Conservatory is its orchestral department which maintains a complete orchestra, conducted by George W. Chadwick, the eminent composer and director of the Conservatory. During a sudden change in the Boston Symphony Orchestra, last year, that organization was able to draw upon the Conservatory orchestra for players, most of which have continued as permanent members of the Boston Symphony Orchestra. The students come to the Conservatory from every state in the Union and from several foreign countries, and enjoy facilities for musical development and public appearance given in no other similar institution in this country or elsewhere. Jordan Hall, which is the auditorium and concert-hall, and named after its chief benefactor, the late Eben D. Jordan, has one of the finest organs in this country, having recently been re-built. Here are given almost daily, during the season, concerts by eminent musicians, also high-class performances by the Conservatory orchestra, members of the faculty and advanced students. The faculty is composed of over a hundred instructors of international reputation, and every department of music is fully and ably represented. The students' curriculum comprises not only instruction in every department of music, but in the allied arts. Though the institution is self-supporting, the running expenses are enormous, and requests to its regular endowment-fund are frequently received from persons of means who appreciate the importance of carrying on and developing so noble and important an educational institution. On account of the thorough musical training the New England Conservatory of Music has given to the hundreds of students it has graduated during its years of existence, it has had a vast influence on musical education in every part of the United States.

It is also interesting to note that in this army of conservatory students there are many who practice photography as a hobby. Those of our readers, or whose children, who may wish to attend the Conservatory of Music, will find many sympathetic camera-workers.



WITH THE TRADE



R. J. Fitzsimons and Autochromes

THERE is a charm about photography with Autochrome plates that is without equal. To obtain a picture of a rose, a basket of fruit, a beautiful landscape or the face of a loved one in natural colors is an achievement that is a perpetual delight. Perhaps, the best part of it all is that the process is simple and within the photographic grasp of the average amateur photographer. Even beginners have made remarkably successful Autochromes. R. J. Fitzsimons, 75 Fifth Avenue, New York City, issues a booklet on Autochrome Photography that should be in the hands of every worker who is interested in natural-color photography. A postcard request will bring a copy to any address.

The RWK Photo-Printer

AMATEUR and professional photographers are beginning to appreciate the value of a good photo-printer. It will be remembered that when the developing-tank first made its appearance, there were many who were averse to using it. Now, the developing-tank is a standard photographic accessory. So it is with photo-printers. Careful workers are beginning to appreciate their practical value. The RWK Photo-Printer, manufactured by the R. W. Kittredge Company, 812 W. Superior Street, Chicago, is made for service and we are confident that our readers will be interested to obtain the latest descriptive matter from the manufacturer.

The Milner Light-Gauge

It goes without saying that the average amateur—and many a professional—photographer obtains better results by using an exposure-meter than by trusting to guesswork. Although there are several excellent exposure-meters to be obtained, there is room for the Milner Light-Gauge. We have tested it carefully and find that it does what its maker claims for it. It is a handy little "pocket-piece" of metal $1\frac{3}{4}$ inches in diameter and about as thick as a fifty-cent piece. It gives the exposure so quickly, simply and accurately that it should become very popular with workers who desire to determine the exposure without consulting tables, factors, tinting paper, looking through an eyepiece and otherwise occupying too much time. This new little device is to be used for pictures out of doors only. It is not intended to be used for interiors or with artificial light. Interesting descriptive matter may be obtained from G. M. Milner, the manufacturer, Underwood Building, San Francisco, California.

Kalosat Spectral Diffusion-Lens

In October, 1919, Dr. H. D'Arcy Power conceived the idea to utilize quartz in the manufacture of a certain type of photographic lens with which he hoped to obtain speed, modeling and a beautiful quality of diffusion. He brought his problem to the scientific staff of the Hanovia Chemical and Manufacturing Company of Newark, New Jersey. After exhaustive experiments, a synthetic quartz of optical quality was produced which resulted in the Kalosat lens of to-day. Dr. T. W. Kil-

mer and Dr. E. L'H. McGinnis made several careful tests, the results of which were published in the April, 1920, issue of PHOTO-ERA MAGAZINE. We are glad to announce that a new, illustrated catalog of Kalosat Lenses is ready for distribution and to suggest that every amateur and professional photographer obtain a copy; for it contains valuable technical information in addition to a detailed description of Kalosat Lenses. The Manufacturers will be pleased to give prompt attention to all inquiries.

Ralph Harris & Company

IN all justice to the many excellent dry-plates and photographic papers manufactured in the United States, we concede gladly that our British cousins are making photographic products that are of the finest quality. Of several well-known British dry-plates and papers, none is more favorably received in the United States than the Wellington. A glance at the date of the many pictures that have appeared in PHOTO-ERA MAGAZINE will show that a large number owe their technical excellence to the Wellington products used by the photographer. Ralph Harris & Company, 26 Bromfield Street, Boston, Mass., are the sole agents in the United States for Wellington plates and papers. A postcard inquiry will bring interesting descriptive matter to any reader of this magazine.

"Every Click a Picture"

PERHAPS, in no field of human activity is more done to smooth the hard road of the beginner than there is in photography. Manufacturers of lenses, cameras and photographic apparatus spare no expense to prepare carefully written and well-illustrated descriptive matter to aid the beginner to obtain the best results. Burke & James, Inc., 240 East Ontario Street, Chicago, have issued a booklet, "Every Click a Picture," that contains seventeen pages of "meaty," illustrated photographic information and twenty-three pages of detailed description of the well-known Rexo Cameras, Rexo Record, Films and Rexo Developing Paper. The manufacturers state that this booklet may be obtained free of charge upon application.

The Halldorson Company

It is a question whether the motion-picture studio or the at-home portrait-photographer is responsible for the remarkable development in recent years of artificial illumination for photographic purposes. A number of firms are now engaged solely in the manufacture of illuminating equipment for the photographer. Among these, The Halldorson Company, 1772 Wilson Avenue, Chicago, needs no introduction to readers of PHOTO-ERA MAGAZINE. Halldorson Flash-Lamps, Electric Lamps, Flashpowder and accessories are to-day a standard product. The new Halldorson Portrait Electric Lamp is of especial practical value and possesses a number of improvements regarding which the manufacturers will be pleased to send detailed descriptive matter to any interested reader.

Wollensak World

PUBLISHED BY THE
WOLLENSAK OPTICAL COMPANY
ROCHESTER, NEW YORK

DEVOTED TO
LENS AND SHUTTER
INFORMATION

Vol. I

JUNE, 1921

No. 6

THE VERITO

the only soft-focus lens in
the world that has these
11 distinctive features

(1) Three different qualities of diffusion available with the Verito, (1) used in the regular way, (2) with lens elements interchanged and (3) with rear element alone.

(2) Variable and controllable softness, as much or as little as you want, by changing diaphragm.

(3) Rear element used alone has focal length about half again equivalent focus.

(4) Extreme speed of F:4 makes the Verito ideal for portraiture.

(5) Virtually free from flare or halation when properly used.

(6) Has the the same visual and chemical foci.

(7) Beautiful enlargements from sharp negatives, with delightful softness, can be made with the Verito.

(8) The Verito reduces retouching at least 60%, for the



One of the prize-winners in Speed Class of recent Amateur Contest, made by J. Deffebach, Jr., with the Series II Velostigmat f:4.5. Reproduction enlarged 25% from original. Despite nearness of subject and rapid motion, original negative shows excellent definition and perfectly arrested motion.

harsh and wiry lines are pleasingly subdued.

(9) Better prices may be asked for Verito portraits. Customers appreciate their more artistic merit.

(10) The Verito pays for itself many times over, bringing better prices and reducing retouching expense.

(11) Free trial of this distinctive lens is offered by all stock houses and dealers.

LET US TELL YOU MORE ABOUT IT.

WINNERS

In Amateur Contest

The recent Wollensak Amateur Photographic Competition was a marked success. The hundreds of prints were so uniformly excellent, that the judges experienced some difficulty in deciding upon the following as winners.

Speed Class

First—\$20. John Deffebach, Jr.
Second—\$10. Charles Priklik
Third—\$5. Ralph Beebe

General Class

First—\$20. Geo. W. French.
Second—\$10. Rile Prosser.
Third—\$5. R. J. Robey.

Pictorial Class

First—\$20. W. H. Porterfield.
Second—\$10. William F. Nugent.
*Third—\$5. John N. Consdorf.
*Third—\$5. E. M. Oswald.
*Duplicate award made.

For further information, use this coupon.

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Gentlemen: I am a { professional } { amateur } photographer and am interested in a lens for

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(State scope of work) (State Type)

Dealer's Name..... Name.....

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Grippit is the adhesive which **cannot wrinkle** or curl your mounts.

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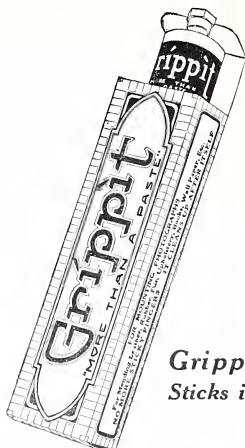
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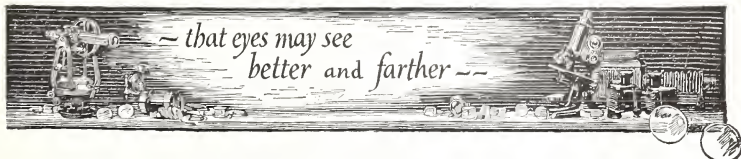
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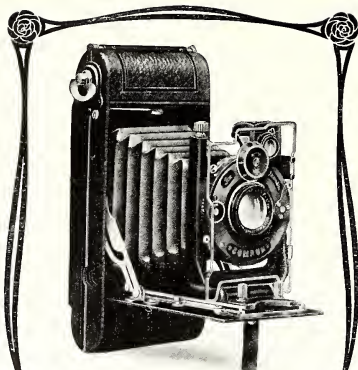
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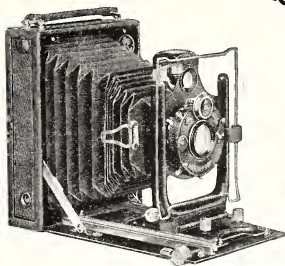
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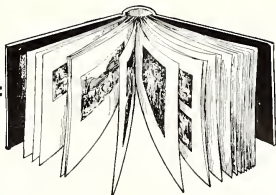
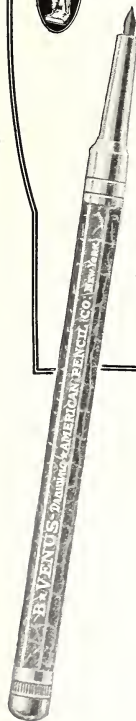
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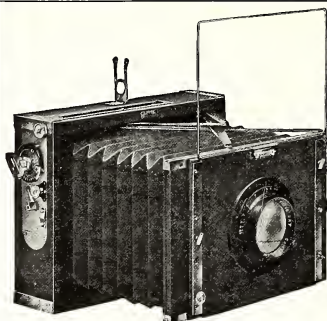
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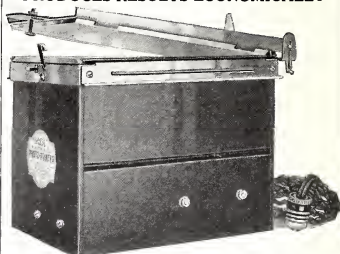
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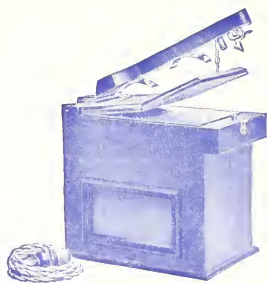
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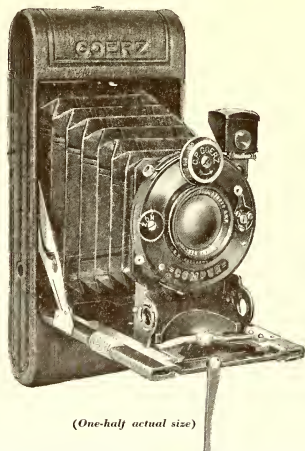
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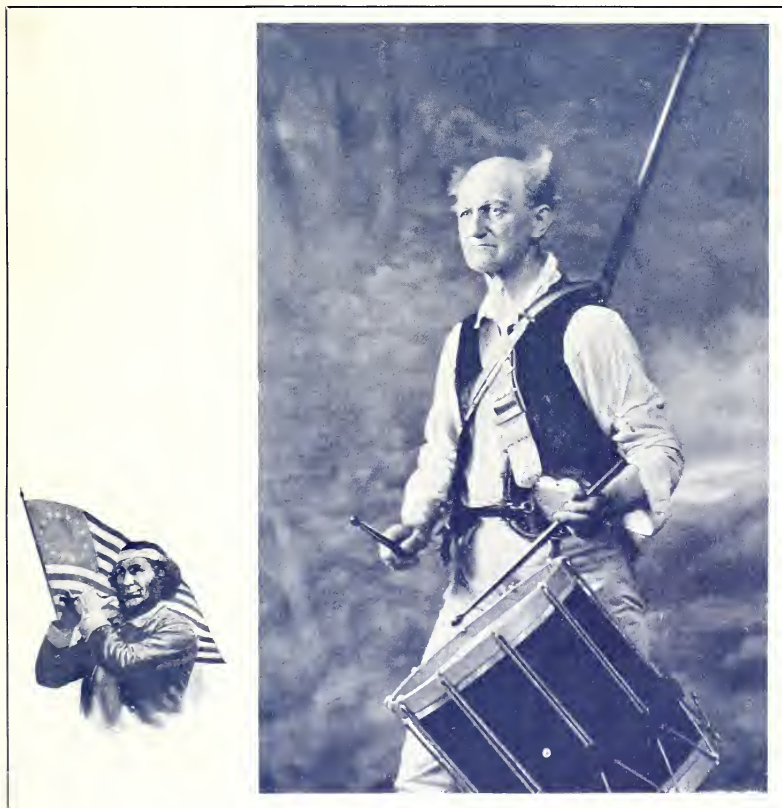
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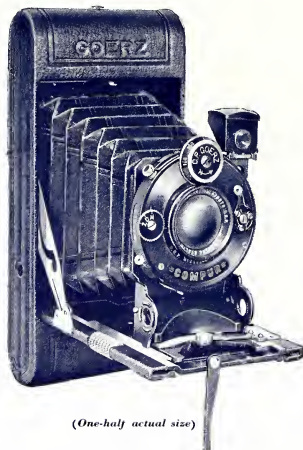
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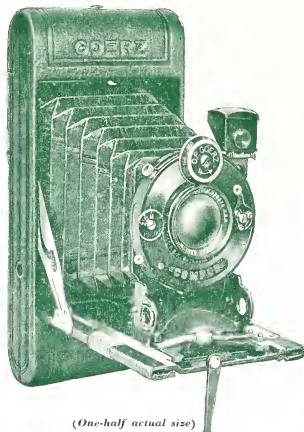
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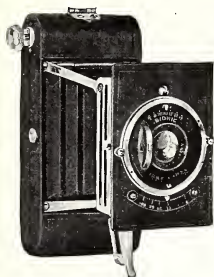
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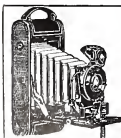
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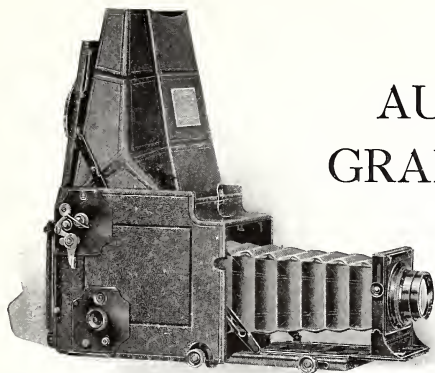
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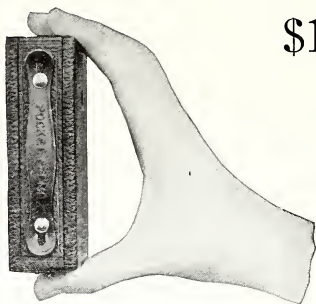
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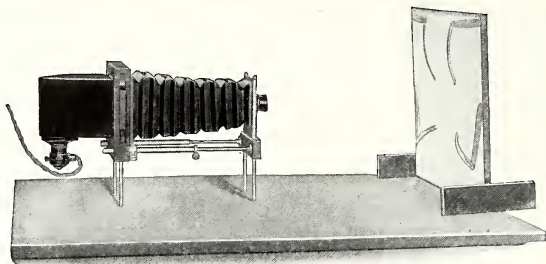
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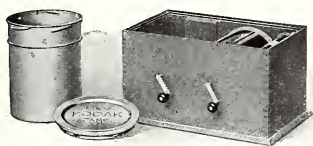
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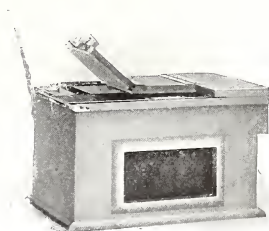


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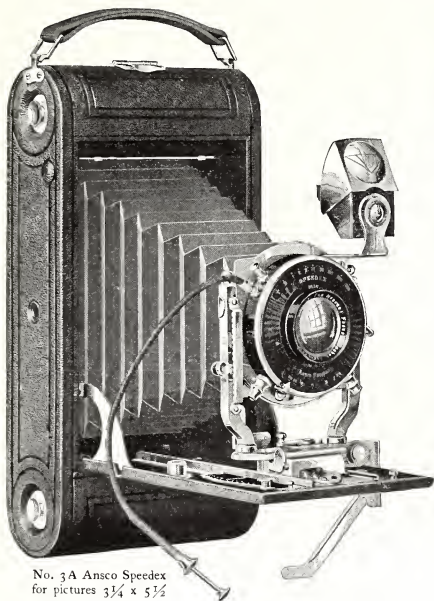
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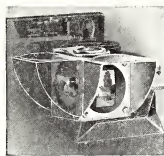
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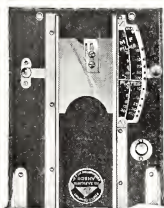
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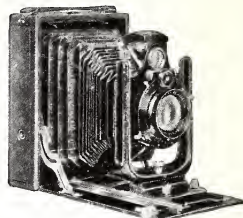
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To Contributors: Contributions relating to photography are solicited and will receive careful consideration. Preference is given to MS. that is typewritten, and to authors who are practical amateur or professional photographers.

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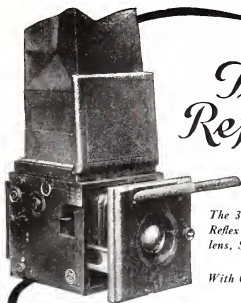
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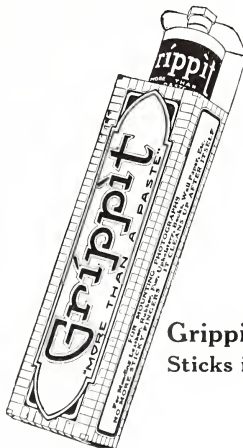
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Behind the Motion-Picture Screen.....	Austin Lescaboura.....	3.50	June 1920
Condensed Course in Motion-Picture Photography.....	N.Y. Institute of Photography.....	6.00	Aug. 1920
Everyman's Chemistry.....	Elwood Hendrick.....	2.00	Dec. 1917
Handbook of Photomicrography.....	H. Lloyd Hind & W. B. Randles.....	4.00	June 1914
How Motion-Pictures Are Made.....	Homer Crox.....	4.00	Jan. 1919
How to Make Good Pictures.....	Eastman Kodak Company.....	.40	
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Light and Shade—And Their Applications.....	M. Luckiesh.....	3.00	
Modern Telephotography (paper edition, \$1.50).....	Capt. Owen Wheeler.....	cloth, 1.75	Aug. 1910
Optics for Photographers.....	Hans Harting, Ph.D.....	2.50	Aug. 1918
Photo-Engraving Primer.....	Steven H. Horgan.....	1.50	Nov. 1920
Photography and Fine Art.....	Henry Turner Bailey.....	2.50	Apr. 1919
Photography and Its Applications.....	William Gamble, F.R.P.S.....	1.00	Nov. 1920
Photography for Students of Physics and Chemistry.....	Louis Derr, A.M., S.B.....	2.25	Dec. 1913
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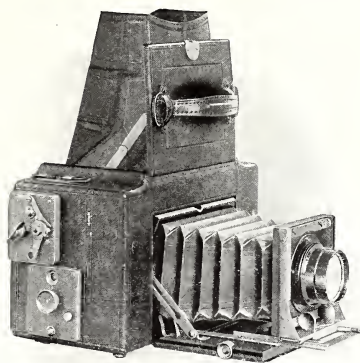
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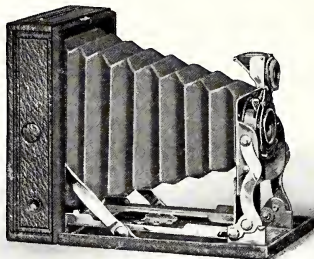
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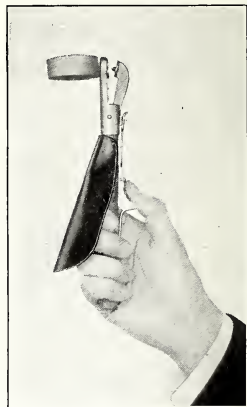
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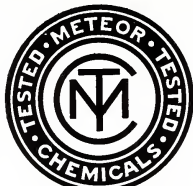
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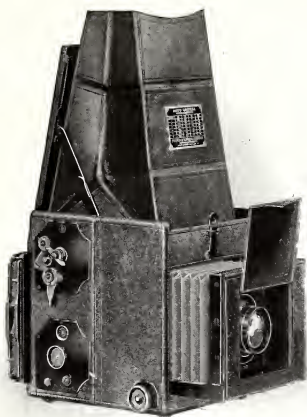
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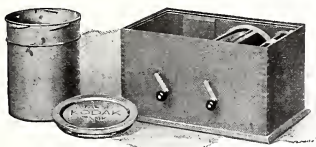
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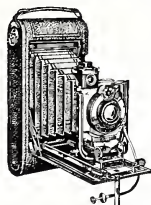
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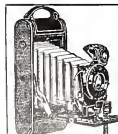
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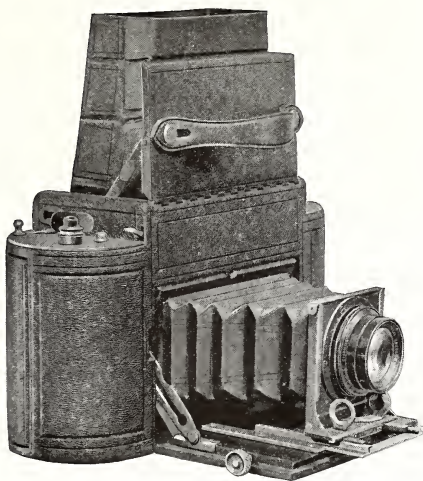
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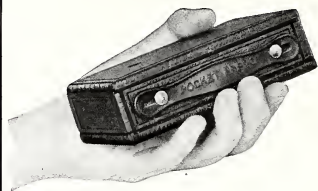
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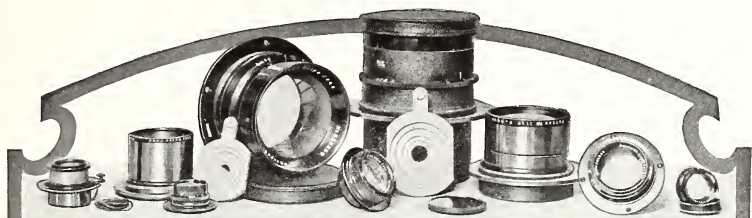
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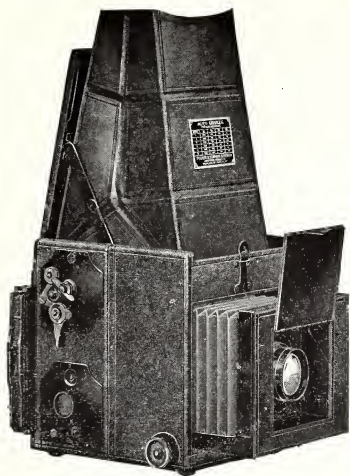
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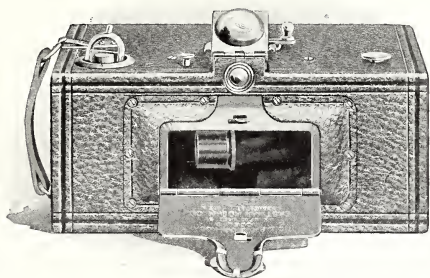
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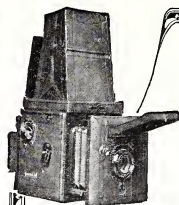
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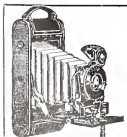
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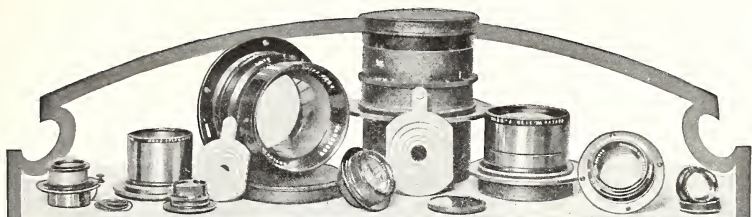
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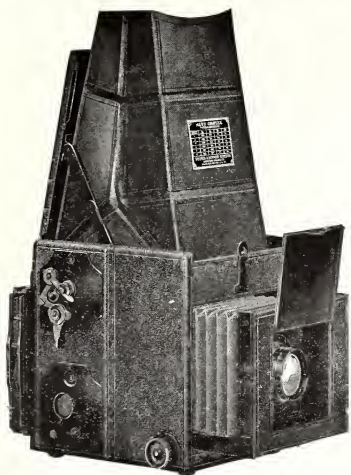
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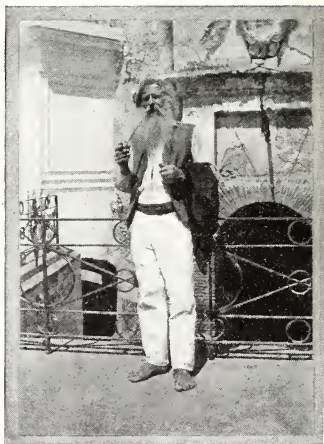
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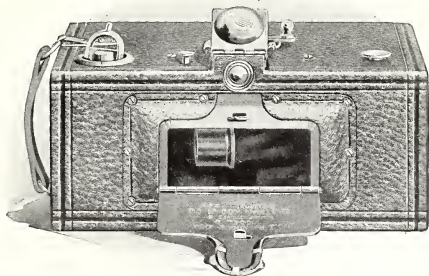
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